

# THE BOSTON Medical and Surgical JOURNAL

VOLUME 195

OCTOBER 14, 1926

NUMBER 16

## ORIGINAL ARTICLES

### THE TREATMENT OF HEMANGIOMA AT THE COLLIS P. HUNTINGTON MEMORIAL HOSPITAL\*

BY GRANTLEY W. TAYLOR, M.D.

THE following is a report on the 193 patients with hemangioma who have come to the Collis P. Huntington Memorial Hospital during the years 1914-1925 inclusive.

#### CLASSIFICATION

Classification of these lesions is difficult and unsatisfactory, partly because pathological examination is made in only a few instances, and partly because the records sometimes furnish incomplete descriptions. A rough classification, based chiefly on the extent and depth of the lesion, is adequate for our present purpose.

A. Telangiectatic angiomas: Minute bright red points, with radiating cutaneous vessels, of no appreciable depth. There were 13 cases in the series.

B. Port wine marks: Diffuse, sharply outlined, red or purple areas in the skin, without appreciable depth. These lesions are invariably present at birth or soon after. There were 13 cases in the series.

C. Circumscribed superficial lesions: Small slightly raised or thickened bluish or red lesions, with a definite spongy consistency which indicates appreciable depth. These are usually present at birth or soon after. There were 67 cases in the series, of which 17 presented multiple lesions.

D. Diffuse superficial lesions: Extensive ill-defined areas which differ from the port wine marks (B) in being less sharply outlined and of paler color, and in presenting the spongy consistency which indicates depth. These are invariably present at birth or soon after. There were 6 such lesions.

E. Deep lesions: These involve the skin only secondarily or not at all. They are commonly soft and spongy, although there may be firm areas due to fibrosis. There were 38 cases in the series.

F. Circumscribed superficial lesions involving the mucous membranes: There were 51 cases in the series.

G. Diffuse deep lesions involving the mucous membranes: These have a tendency to grow rapidly and bleed freely. There were 5 cases in the series.

#### ETIOLOGY

There were 108 females and 85 males. This slight sexual difference may be explained by the fact that treatment is usually sought for cosmetic reasons.

The regions involved are presented in Table 1. The preponderance of facial lesions is to some extent explainable on the same cosmetic ground.

TABLE 1

#### ANATOMIC DISTRIBUTION OF THE LESIONS

	No. of cases
<i>Skin and subcutaneous lesions</i> .....	146
Face.....	103
Scalp.....	6
Neck.....	3
Trunk.....	15
Upper extremity.....	13
Lower extremity.....	6
<i>Mucous membrane lesions</i> .....	57
Lip.....	23
Buccal cavity.....	25
Nasal cavity.....	5
Conjunctiva.....	2
Cervix uteri.....	1
Fundus uteri.....	1

The age at onset is presented in Table 2. It will be noted that there were as many late appearances as there were appearances within the first year.

TABLE 2

#### AGE OF PATIENTS AT FIRST APPEARANCE OF LESION

	No. of cases
Present at birth.....	55
Appeared within first month.....	21
Appeared first month to one year.....	10
Late appearance.....	86
Not recorded.....	21

\* Publication of the Cancer Commission of Harvard University.

Only 12 cases gave a history of trauma preceding the onset of the angioma. These were chiefly minute superficial lesions involving the mucous membranes.

#### HISTORY AND EXAMINATION

In addition to tumor or discoloration, 29 patients gave a history of bleeding; 21, of ulceration; and 23, of subjective symptoms, chiefly pain, itching, etc.

Growth was recorded as slow or gradual in 109 cases and as rapid in 9. No change of size was observed in 21 cases, and no record of growth was made in 54 cases. Rare cases gave a history of regression or of intermittence in the appearance of the lesion.

Previous treatment had been given in 56 cases, as follows:

Excision	21
CO <sub>2</sub> snow	15
Radium	7
Cautery	6
X-ray	6
Miscellaneous	14

The size of the individual lesions is given in Table 3.

TABLE 3  
LESIONS CLASSIFIED ACCORDING TO SIZE

	No. of cases
Less than 2 cm. in diameter	107
2-4 cm. in diameter	32
Greater than 4 cm. in diameter	38
Size not stated	16

At the time of examination, dilated vessels were visible in 42 cases and ulceration in 17 cases.

#### TREATMENT

##### Surgical

Twenty-one cases were treated by surgical excision of the lesion, using novocaine anesthesia. In general, surgical excision was practiced when the lesions were small and accessible, when cosmetic result was a minor consideration, or when some doubt was entertained as to the diagnosis.

All but one were 1 cm. or less in diameter. The exception was described as the size of a silver dollar and was growing rapidly. Fifteen of these involved the buccal mucosa and 6 involved the skin. Previous treatment has been given as follows:

Excision	2 cases
Incision	2 "
Electric needle	2 "
Radium	2 "
Biopsy	1 "

One of the patients developed a recurrence in scar, which was cured by a second excision. One, in whom the pathologist reported "A sarcomatous element may be present," was not followed. The others were cured by operation. Pathological report was "angioma" or "cavernous angioma" in all cases save the one noted.

##### Radium

One hundred and thirty-three patients were treated with radium. Of these, two were later treated surgically, and two received X-ray treatment in addition to radium treatment.

The type and method of treatment has varied greatly during the eleven years covered by this report, especially during the early period. Radium emanation has been used exclusively, save in some of the earliest cases. The emanation is pumped into capillary glass tubes, as described by Daland<sup>1</sup>. These are placed in steel jackets about 0.25 mm. thick. Our practice in recent years has been to place such tubes within silver cylinders of 0.5 mm. to 1.0 mm. thickness, for the purpose of filtering out the caustic beta rays. A tube so prepared may advantageously be elevated on 0.5 to 1.0 cm. of wood or gauze, for the purpose of securing a more diffuse effect. It is assumed that the area of effective action is doubled with each 0.5 cm. of elevation. Such silver screened radiation is employed in practically all the superficial lesions in which a cosmetic result is desirable.

In cases of deep-seated lesions sometimes the tubes are encased in lead cylinders of 2.5 mm. thickness, and elevated on 2-3 cm. of gauze. This permits very heavy radiation with a minimal destructive action on the skin, especially when cross-firing is used.

In three cases of involvement of the nasal passages with obstructive growth emanation seeds were used. These minute glass capsules, each containing about one milliecurie of emanation, are planted directly into the growth with trocars, to secure the destructive action of the beta rays.

##### DOSAGE

It is assumed that 15 milliecurie hours of the bare (steel jacketed) tube laid directly on the surface of the skin is usually sufficient to cause an ulcerated area about 1 cm. wide and slightly longer than the tube. Half of this "ulcerative" dose, doubled for each 0.5 mm. of silver filtration, and for each 0.5 cm. of distance above the skin surface, is the usual first dose for an angioma. Thus with a tube of 90 milliecuries, filtered with a 0.5 mm. silver cylinder and elevated on 0.5 cm. of wood, the first dose would be of 20 minutes duration. Such a dose would be effective over an area about 2 cm. wide and twice as long as the tube, and could be repeated on adjacent untreated areas until the whole surface of the angioma had received treatment.

Care is taken to avoid untoward skin reactions, and when these occur further treatment must be deferred and the dose reduced. If no reaction occurs, and no improvement is observed, it is reasonable to increase the dose up to 3/4 or even 7/8 of the calculated ulcerative dose, provided this is done cautiously, with slight increases at a time. Adjacent uninvolved areas are commonly protected with 1 mm. of lead covered with adhesive plaster.

In using tubes heavily screened with lead for pure gamma radiation, the first dose is about 800 millicurie hours, filtered with 2.5 mm. of

come to the clinic, or who are still under treatment. There were 76 cases in the former group, and 55 in the latter. Eighteen patients in the inadequately treated group received 5 or more treatments each, and I have included them with the adequately treated group in considering the results of radium treatment. I have considered results good when the angioma has been cured and a satisfactory cosmetic result has been obtained. I have considered them fair when there has been improvement in the angioma at the expense of some cosmetic impairment. The results are summarized in Table 5.

TABLE 4  
NUMBER OF RADIUM TREATMENTS

Type of angioma	No. of cases	No. of treatments	Average	Range	% Receiving more than 10 treatments
Telangiectatic	8	2	1-4		0
Port wine marks	6	36	7-78		83.3
Circumscribed superficial	36	6	1-19		16.
Diffuse superficial	6	12.5	6-23		50.
Deep	20	11	1-38		65.
<i>Mucous Membrane Lesions</i>					
Circumscribed superficial	12	4	1-11		8.3
Deep	6	16	6-29		66.7
Total	94	7.2	1-78		33.3

TABLE 5  
END RESULTS OF RADIUM TREATMENT

Type of angioma	No. of cases	% of good results	% of fair results	% showing scars	% showing telangiectases
Telangiectatic	8	87.5	12.5	25	12.5
Port wine marks	6	0	50	100	100
Circumscribed superficial	36	91.6	8.4	44.4	16.7
Diffuse superficial	6	0	50	83.3	33.3
Deep	20	80	15	35	5
<i>Mucous Membrane Lesions</i>					
Circumscribed superficial	12	100	0		
Deep	6	0	100		

lead and used at a distance of 2.5 cm. from the surface of the skin. The patient must be watched carefully for evidence of local or systemic reactions. If none occurs the dose may be increased to 1000 or even exceptionally to 1200 millicurie hours.

The interval now most commonly employed between treatments is six weeks, although sometimes it is shortened to a month.

The number of treatments required for adequate treatment in the various groups is presented in Table 4. In general it may be said that larger and deeper lesions require more treatment than smaller superficial lesions.

#### RESULTS

I have divided the cases treated into two groups, those who received adequate treatment, i. e., who persisted in treatments as long as we felt it desirable; and those who received inadequate treatment, i. e., who failed to continue to

It is at once apparent from the table that telangiectatic angiomas, and the small superficial lesions of skin and mucous membranes respond most favorably to radium treatment. This fact is borne out by the relatively small number of treatments required, by the high percentage of good results, and by the relatively fewer scars and telangiectases. It will be noted that the mucous membrane lesions required fewer treatments than the cutaneous lesions. This is due in large measure to the fact that doses could safely be greater when a cosmetic result was not essential.

It is also apparent from the table that port wine marks and diffuse superficial cutaneous lesions do not respond well to radium treatment. Great numbers of treatments are required, and extirpation of the lesion is secured if at all only at the expense of extensive scarring and telangiectases.

The treatment of deep lesions, involving skin

or mucous membranes, is fairly satisfactory. The mucous membrane lesions may be treated more vigorously than skin lesions, but this advantage is offset by their propensity to bleed, and by the difficulty of defining their limits accurately. The treatment in most of the deep lesions is directed primarily at the tumor and the symptoms and impairments of function due to tumor, and cosmetic result is of secondary or even negligible importance.

#### REACTIONS

Reactions occurred after one or more treatments in 64 patients, severe reactions in 49. Mild reactions were limited to transitory erythemas, while severe reactions involved crust formation and often ulceration. These reactions commonly appear about ten days to two weeks after treatment, although in exceptional cases they may be delayed in appearance until the fourth week. Only one patient showed systemic reaction, characterized by malaise and anorexia, following heavily screened radiation.

Only 5 patients developed local reactions following silver screened radiation. In 3 of these ulceration resulted. The other local reactions all followed the use of bare steel tubes, often with surprisingly small doses. In one case the chronic radium ulcer was excised surgically.

In Table 5, the percentage of scars and telangiectasis has been computed for the skin lesions only. In explanation of the rather high incidence of scars, it is only fair to point out that the examiner often refers to the site of a previous lesion as a "scar," even though there may never have been ulceration present.

As I pointed out above, the severer types of reaction followed use of bare steel tubes almost exclusively. Of the 5 patients who presented

reactions following silver screened treatment, none showed telangiectases. Three showed some degree of scarring, in one case on the lip, in one on the foot, and in the third on the inside of the cheek. The doses in the two latter cases were considerably larger than they would have been, had a cosmetic result been of great importance.

#### UNTREATED CASES

Forty-one patients received no treatment. Many were referred for diagnosis only, some refused treatment, and some were referred to other clinics for treatment.

#### SUMMARY

One hundred and ninety-three cases of hemangioma are described and analyzed. The results of surgical treatment are given. The technique of radium treatment and the results secured with it are discussed.

#### CONCLUSIONS

Surgical excision is the method of treatment to be preferred in small accessible hemangiomas when a scar will not be disfiguring.

Radium treatment is successful in telangiectatic angiomas and in small superficial lesions of skin or mucous membranes.

Radium treatment is moderately satisfactory in deep seated lesions.

Radium treatment is unsatisfactory in port wine marks and in superficial diffuse lesions.

Reactions with their sequelae of scars and telangiectases can largely be avoided by using only silver screened radiation.

#### REFERENCE

- 1 Daland, E. M.: End Results of Radium Treatment of Cancer. *J. A. M. A.*, 86, 471-475.

## THE VALUE OF COMPLETE ROUTINE EXAMINATIONS IN SUPPOSEDLY HEALTHY PEOPLE\*

BY EUGENE L. FISK, M.D.

THE term "complete examination" is, of course, here used in a relative sense. A complete examination in the sense of a full utilization of all available scientific resources for testing the quality of human tissues, the functional capacity of organs, the possible variations from the normal under varying conditions of stress, would be an undertaking outside the practical fields of preventive or clinical medicine. Such an examination would require that the subject be kept under observation for one year, that comparative studies be made and oftentimes therapeutic tests, if a really complete picture of the life and body under consideration were

to be evoked. The subject of such a study would be more than likely a victim or martyr to science rather than its beneficiary.

Whether a given routine of examination may be regarded as complete in a practical sense depends to a considerable degree on the purpose of the examination and the objective of the general sociologic program of which it is a part.

An examination that attains its practical ends in its own particular field, whether it be industry, life insurance, or military service, may be regarded as complete. It is idle to criticize such examinations or to say they are not complete because they do not include a Wassermann test or an electrocardiogram or an X-ray of the chest.

While in the interest of the life of the individ-

\*Paper read upon invitation, by Dr. Eugene L. Fisk, Medical Director, Life Extension Institute, at the meeting of the Medical Association of the Greater City of New York, New York Acad. of Medicine, Monday, May 17, 1926.



idual such special tests may often be strongly urged, their use for the purpose of the health examination, as rendered insurance policyholders for example, may not be economically justified, inasmuch as the probable savings in mortality would not cover the expense on policies of average amount.

In considering the periodic health examination we must keep in mind the urgent need of extending it as widely as possible throughout the population.

This requires that there be adjusted a practical method of examination which can be brought within the reach of the whole people. Fortunately this matter is facilitated by the economic interest that industry and life insurance have in the reduction of the sickness rate and death rate. With industry and life insurance bearing a considerable part of the cost, a periodic health examination service that is sound and practical can be extended to many millions of people, and better still, with the coöperation of the general practitioner in medicine, in the conduct of the major portion of this work.

It is idle to set up a standard for these examinations which is beyond the general practitioner to attain, and which would involve an expense that would limit the benefit of such a system to a small group in the population. That is, it is idle to urge the adoption of a method that is too expensive or too extended to be made popular. It is not idle, however, to demonstrate the value of a genuine practically complete check-up of the human body, made with the laboratory aids and instruments of precision that have become available in recent years.

The type of examination I shall describe tonight is called the Vital Protective examination. Its purpose is to elicit data pointing to possible organic disease. It is based on the theory that if the routine followed elicits normal reactions, or practically normal reactions, it may reasonably be assumed that, barring accidents, physical or pathological, such an individual is not liable either to sudden death or the early development of any serious disabling organic disease.

The Vital Protective routine includes:

- (1) Examination of the eyes, ears, nose and throat by a specialist in this field.
- (2) General physical examination.
- (3) Hemoglobin blood test.  
Chemical and microscopical examination of the urine four times a year.  
Mid-year review of the case by means of a special form of written questionnaire.
- (4) X-ray of chest.
- (5) Electrocardiogram.
- (6) Blood metabolites. (Sugar: Urea: Creatinin: Uric acid.)
- (7) Tonsil culture.
- (8) X-ray of teeth.
- (9) Urine concentration test.

- (10) Blood smear (Differential count).
- (11) Red and white count or examination of feces or of gastric contents.

Important men of affairs who are occasionally chilled by the sudden death or breakdown of some leading man in industrial or professional life, are peculiarly appreciative of such examination. It is of great importance for such men to know whether they can count on a fairly long look ahead in their chosen work.

More important, however, is the opportunity afforded by the testimony drawn from such examination to protect the vital organs, to remove the cause of organic strain or irritation, and to adjust the life in accordance with the ascertained equipment of the individual to live, and work, and play.

The following tables set forth in a general way the results of such examination in a group of one hundred policy-holders of the Metropolitan Life Insurance Company who were entitled to the standard examination service of the Institute:

CLASSIFICATION ACCORDING TO DEGREE OF IMPAIRMENT

100 Policyholders Examined Under the  
Vital Protective Routine

(Average Age 43)

Class	Number
1. No physical defects or errors in hygiene..	0
2. Very minor defects requiring attention or observation .....	0
3. Minor defects requiring hygienic correction, or minor medical, surgical or dental attention .....	12
4. Moderate defects requiring medical supervision as well as hygienic correction. Impairment influencing longevity.....	70
5. Advanced physical impairments requiring systematic medical or surgical attention .....	15
6. Serious physical condition requiring immediate medical or surgical attention....	3

The defects graded as "definite" were for the most part found in two corroborating tests, such as a special heart examination and an X-ray examination of the heart, urine concentration test and blood chemistry; or they were found with such marked deviation from the normal in one test that they could not be included in the group graded as "slight."

The defects graded as "slight" on the other hand were impairments not seriously menacing at the time of discovery, or were found only in one test.

A few illustrative cases will serve to clarify the foregoing discussion and give an idea of the basis of the classifications:

CASE 1

Executive. Age 53.

Physical examination: Slight enlargement of heart; soft blowing systolic murmur at apex. Nycturia; occasional granular casts in urine. Flat foot. Defective vision.

Special tests: Electrocardiogram suggests right ventricular preponderance; slight spreading of initial ventricular complex; marked notching of S in lead one and R in lead three; downward T in lead three. (Interpreted as indicating partial Bundle branch or arborization block). X-ray of chest: slight enlargement of heart; calcified areas at hilus. Urine concentration test shows high fixed specific gravity.

## CASE 2

Retired banker. Age 61.

Physical examination: Low blood pressure (sys. 98, dias. 70). Trace of albumin and 2% sugar in

culture shows staphylococcus aureus. X-ray of chest: moderate general bronchial thickening, increased in upper lobe of right lung. Blood sugar normal. Electrocardiogram shows spreading of initial ventricular complex in leads one and two; notching of R in all three leads; diphase T in leads one and two and inverted T in lead three. (Interpreted as indicating a Bundle branch lesion).

The foregoing cases are listed as serious impairments. How much influence medical supervision and attention covering the removal of focal infections, the regulation of diet and activities, can accomplish in arresting the changes

## STUDY OF 100 POLICYHOLDERS CARRYING INSURANCE OF \$25,000 OR OVER, EXAMINED

## UNDER THE VITAL PROTECTIVE ROUTINE. (Average Age 43)

Disease or Organic Change	Heart		Kidneys		Lungs		Venereal History Clinical signs Wassermann		Tonsils		Teeth		Sugar Metabolism	
	Slight	Definite	Slight	Definite	Slight	Definite	Slight	Definite	Slight	Definite	Slight	Definite	Slight	Definite
A. Impairments found by physical examination and urinalysis.	7	1	10	0	0	0	0	0	49	12	0	36	4	1
B. Impairments found by additional laboratory tests and X-ray examinations.	33	10	35	15	2	0	0	0	0	35	32	25	5	1
C. Number (of B) found by tests indicated by findings of physical examination or urinalysis.	3	2	5	3	0	0	0	0	0	30	9	20	2	1
D. Number (of B) found by tests given by protective routine (no indication of need).	30	8	30	12	2	0	0	0	0	5	23	5	3	0

urine. Systolic apical murmur thought to be functional. Inguinal hernia. Tonsils enlarged, buried and cryptic. Flat foot.

Special tests: Urine concentration test shows high fixed specific gravity (1.030-1.033), high night output (5 to 6), and trace of sugar. Blood chemistry: sugar 220 mgs. per 100 cc.; uric acid 4.6. Tonsil culture shows hemolytic staphylococcus. X-ray of teeth: considerable alveolar resorption; one extensively abscessed molar; one tooth with decay. Electrocardiogram shows definitely prolonged R S complex with marked notching of R throughout. (Interpreted as probably indicating a Bundle branch lesion).

## CASE 3

Merchant. Age 49.

Physical examination: Moderate overweight (5 ft., 8 in.—173 lbs.). Soft apical systolic murmur; slight enlargement of heart. Trace of sugar in urine. Tonsils buried and cryptic.

Special tests: X-ray of teeth: some alveolar resorption; one molar shows apical infection. Tonsil

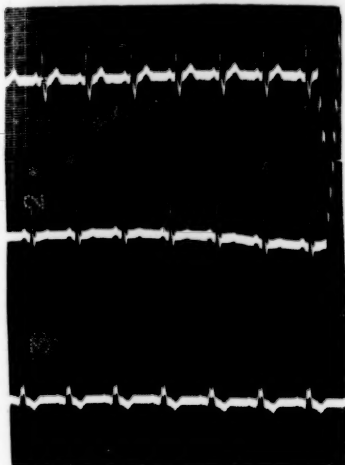
noted is, of course, a matter of debate. It is quite evident from the record, however, that there was nothing in the physical findings that would have directly justified the prediction that the serious conditions revealed by the electrocardiograms would be found on such examination. Hundreds of cases of this description might be examined without such lesions being demonstrated, and there is no certainty that in the course of ordinary clinical supervision the electrocardiograph examination would have been looked upon as a direct indication. The evidence seems to justify the employment of this measure as a routine in a thorough-going clinical or health survey.

## CASE 4

Merchant. Age 36.

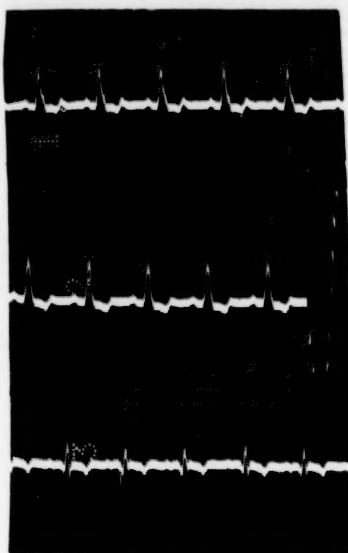
Physical examination: Somewhat low blood pressure (sys. 104, dias. 66). Hemorrhoids. Defective vision not fully corrected.

THREE SERIOUS CASES OF HEART IMPAIRMENT REVEALED BY ELECTROCARDIOGRAM



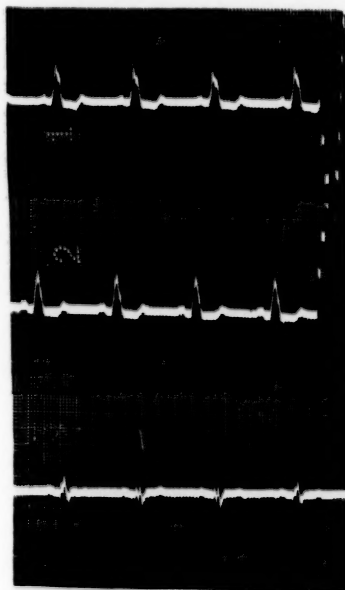
(1)

Suggests right ventricular preponderance; slight spreading of initial ventricular complex; marked notching of S in lead one and R in lead three; downward T in lead three. Interpreted as indicating partial Bundle branch or arborization block.



(3)

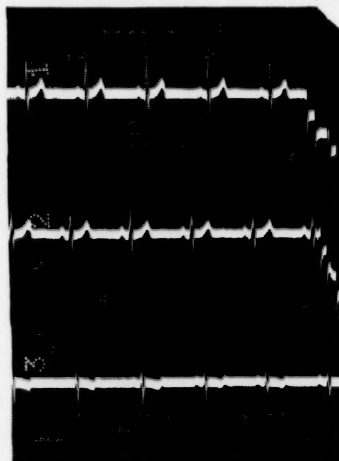
Spreading of initial ventricular complex in leads one and two; notching of R in all three leads. Diphasic T in leads one and two and inverted T in lead three. Interpreted as indicating a Bundle branch lesion.



(2)

Shows definitely prolonged R S complex with marked notching of R throughout. Interpreted as probably indicating a Bundle branch lesion.

A BORDERLINE CASE IN WHICH THE SIGNIFICANCE OF THE FINDINGS IS DEBATABLE



Left ventricular preponderance; slurring of R and S in leads two and three; diphasic T in lead three.

**Special tests:** Wassermann + — with cholesteralized antigen. X-ray of teeth shows two pulpless teeth—one with evidence of root infection. X-ray of chest shows general bronchial thickening with calcified areas at apices suggesting healed foci. Electrocardiogram shows left ventricular preponderance; slurring of R and S in leads two and three; diphasic T in lead three.

This case is regarded as a typical borderline one. The evidence of the electrocardiogram does not justify the positive diagnosis of myocardial change. It does, however, suggest the importance of careful attention to the focal infections present and regulation of the hygiene, further observation of the circulation and periodic checking up with the electrocardiograph.

Slight Wassermann reaction with the cholesteralized antigen is a phenomenon not infrequently observed in cases of focal infection. In the absence of clinical history or any physical signs of syphilis, it seems safe to accept this explanation of the slight reaction with the cholesteralized antigen.

In this case no reexamination has yet been had, but a questionnaire report is to the effect that the individual went under observation and treatment, reduced tobacco, had glasses changed, and the blood pressure and general condition of health had improved.

#### CASE 5

**Executive.** Age 32.

**Physical examination:** Blood pressure sys. 110, dias. 70. Tonsils buried and cryptic. Left-sided varicocele.

**Special tests:** Urine concentration test shows high fixed specific gravity (1.025-1.032), trace of albumin, numerous leucocytes, high night output (3 to 4). X-ray of teeth shows two impacted molars, one pulpless tooth capped and root canals partly filled. X-ray of chest reveals general bronchial thickening with healed foci at hilus. Blood chemistry: uric acid 5 mgs. per 100 cc. Electrocardiogram shows sinus arrhythmia; notched P in lead two and notched R in lead three.

Space does not permit the presentation of more borderline cases, but a number of interesting ones could be cited in which blood chemistry findings or the results of functional tests suggested the importance of rather careful medical observation and follow-up and a critical consideration of the personal hygiene. Of course, in all of these cases the usual laboratory precautions were taken to exclude possible influence of variations in diet and unusual environmental factors.

These policyholders sought the service voluntarily for the usual purpose of the health examination. They were all important business or professional men, carrying \$25,000 insurance or more. It may be assumed that they were all accustomed to the most expert medical attention for themselves and their families. These facts must be taken into consideration in interpreting the figures and comparing them with other less select groups.

The unique feature of this study lies in the fact that in addition to the standard examination of the Institute, which includes a very thorough physical examination of each region of the body, these men were given free of charge against them or their companies, the full routine of the Vital Protective examination, regardless of their apparent condition.

This was done purely as a matter of research. This removed any factor of self-selection, of decision on the part of the individual as to whether or not he would subscribe for any particular test, and assured a more accurate picture of the underlying condition in a group of men of this type.

The outstanding features of the survey are:

(1) The high ratio of definite impairments in this group of high grade business and professional men.

(2) The high ratio of organic defects or important conditions that might lead to organic breakdown, found purely on the routine application of special laboratory tests beyond the range of the fundamental physical examination.

Such data show the fallacy of claiming that for the purpose of the health examination there is little of importance that can be attained by going beyond the use of the eye, ear, hand, stethoscope, sphygmomanometer, test tube and spirit lamp.

It is no part of my thesis to exaggerate the value of this laboratory follow-up or to belittle what the well-trained practitioner can do with his bare hands. The testimony of the laboratory or of instruments of precision and of X-ray studies must always be made a part of the clinical picture and never considered as separate or as constituting the whole picture. It is a wise clinician and also an honest clinician who does not disdain to call in these aids. It is an unwise clinician and, in my judgment, not wholly an honest clinician who self-sufficiently rests his case on his supposed superior powers of intuition to the neglect of the use of means that are within the power of the average physician to employ.

Why should not the highly gifted men in medicine leave to mechanical means what can be definitely determined by such means, and concentrate their power of mind on the borderline problems in medicine which even now baffle the most talented? What clinician will now enter into dispute with a sphygmomanometer as to the actual blood pressure? The varying determinations of arterial tension in the old days, even by expert men, were notorious. And so with other questions.

Any means that will enable men of average ability to serve the public as competently in some diagnostic procedure as the more highly gifted expert, is a gain to the science of medicine in its real mission to serve humanity.

This principle has been well expressed by Sir Thomas Lewis\* as follows:

"In no science, in the true sense of the word, is there the almost open vaunting of and reliance upon personal skill, in no science is supposed manipulative dexterity so venerated as in our realm of medicine. . . . A method depending for its success upon a supposedly unusual sensitiveness of touch or of hearing, is one the clinical scope of which is admittedly limited, the scope of which in science is almost negligible."

On the other hand, the physician who sees only a laboratory report and forgets the patient, is a man of feeble imagination who would fail in some other relationship if the opportunity offered.

In studying a group such as this, I am impressed by the vast untilled field that lies here in this No-Man's-Land of pathology. Ordinarily our testimony as to the value of the electrocardiograph, for example, is derived from the study of people more or less advanced in disease, who have gone through the hands of the general practitioner and have finally landed in the hands of the specialist. Who can say how long these variations revealed by the electro-

\*"The Mechanism and Graphic Registration of the Heart Beat," by Sir Thomas Lewis. London, Shaw & Sons, Ltd. Pages III and IV.

cardiograph have existed? What gradual course have they followed since their incipency? What is their real significance before these people become patients?

Here we have a group of high-grade conservative business men, active at their work. The revelation of incipient pathology in this group shows the importance of extending the scope of the health examination to the widest possible limits.

Where time and money permit, the Vital Protective examination should be sought and can usually be provided by the type of practitioner who serves the well-to-do classes. Where time and money do not permit, the physician must endeavor to show the need for such follow-up as will protect the life, and urge that it be had.

How these more extensive examinations could be brought within the reach of those in the general population of modest means who definitely need them, is a sociological question beyond the scope of this paper and I shall not attempt even an adumbration of a suggestive program. It is to be hoped, however, that as the protective value of these more intensive physical surveys becomes more widely understood, society will devise some means of bringing such privilege within the reach of the average individual.

## The Massachusetts Medical Society

### THE CONTROL OF THE COMMUNICABLE DISEASES PREVALENT IN MASSACHUSETTS\*

With a Study of the Mortality Due to Them During the Past  
Seventy-Five Years

BY EDWARD G. HUBER, M.D.

(Continued from page 714)

#### CONTENTS

Chapter	Page
I INTRODUCTION	87
II HISTORY OF QUARANTINE	122
III HISTORY OF QUARANTINE IN MASSACHUSETTS	169
IV DEFINITIONS OF TERMS AND OF TOPIC	172
V GENERAL DISCUSSION OF CONTROL MEASURES	220
VI THE COMMUNICABLE DISEASES NOTIFIABLE IN MASSACHUSETTS	266

3. *Dysentery.* When, in 1921, the diagnosis of dysentery was changed to dysentery, amebic, bacillary, and undetermined, there were, during the first year after the change eight cases of amebic and sixteen of bacillary dysentery which resulted fatally. This accounted for a little more than half of the 41 dysentery deaths. The next year only 10 of the 29 deaths from dysentery were ascribed to a specific cause. Table 15 shows figures for dysentery similar to

those in tables 13 and 14 for typhoid and diarrhea respectively, except that fourteen periods only are taken, owing to the sharp decrease in the number of deaths.

As the seasonal distribution is practically the same as in the case of diarrhea, it may again

TABLE 15

Period	Age 10-39	Period	Age 10-39
1849-1853	13.0%	1884-1888	9.2%
1854-1858	9.9%	1889-1893	8.9%
1859-1863	11.7%	1894-1898	11.7%
1864-1868	13.4%	1899-1903	7.9%
1869-1873	8.6%	1904-1908	6.5%
1874-1878	9.8%	1909-1913	7.4%
1879-1883	9.5%	1914-1918	9.2%

be assumed that half the deaths between the ages of 10 and 39 were due to typhoid and paratyphoid. Column 5 of table 12 shows the actual numbers to be added. Figures 71 and

\*Published by the Committee on Public Health of the Massachusetts Medical Society.





72 show respectively seasonal and age distributions of dysentery.

4. *Enteritis*. Enteritis was discontinued as an official cause of death when in 1901 it was combined with diarrhea and two classifications were made,—under two years of age, and over. Figure 74 shows the increasing proportion of deaths under 5, from 1849 to 1900. Figure 73 shows a seasonal distribution with the peak nearly always in August, and the larger the number of deaths at age under 5, the sharper and taller the August peak. In the earlier periods when the proportion of cases from 10-39 was greater there were also relatively more deaths in September and the secondary spring peak was also much more noticeable. Table 16 shows the percentage of deaths from enteritis at ages 10-39.

TABLE 16

PROPORTION OF MORTALITY FROM ENTERITIS AT AGE 10-39

Period	Age 10-39	Period	Age 10-39
1849-1853	34.5%	1879-1883	18.7%
1854-1858	34.1%	1884-1888	13.5%
1859-1863	30.8%	1893-1898	12.0%
1864-1868	34.6%	1899-1903	6.4%
1869-1873	32.2%	1904-1908	4.0%
1874-1878	23.4%		

If, again, half of the deaths from enteritis at 10 to 39 years of age were really typhoid or paratyphoid the actual number of deaths to be added appears in column 6, table 12. It will be noted that the number of deaths per annum recorded in the latter table (column 6) varies within narrower limits than do the percentages in table 16 since the great increase in total deaths from enteritis from year to year was at ages under 5.

5. *Cholera*. For cholera the age distribution of deaths has been more even than in any of the other members of the enteric group. In figures 75 and 76 the years 1849 and 1854 are omitted because of the epidemics of Asiatic cholera in those years. Table 17 shows that a very large proportion of deaths ascribed to cholera occurred between the years 10 and 39. The seasonal distribution of deaths did not vary much from period to period, the peak being in August in every year but two and then it was in September and July, respectively, with August only slightly lower on the latter occasion. In 1901 the terminology was changed to cholera nostras and the number of deaths ascribed to it became much lower than when the term cholera had been used.

In view of these age and seasonal distributions, and since cholera was probably not endemic to any marked extent even in the early part of the second half of the nineteenth century, it certainly seems to be a conservative estimate to conclude that at least half the deaths

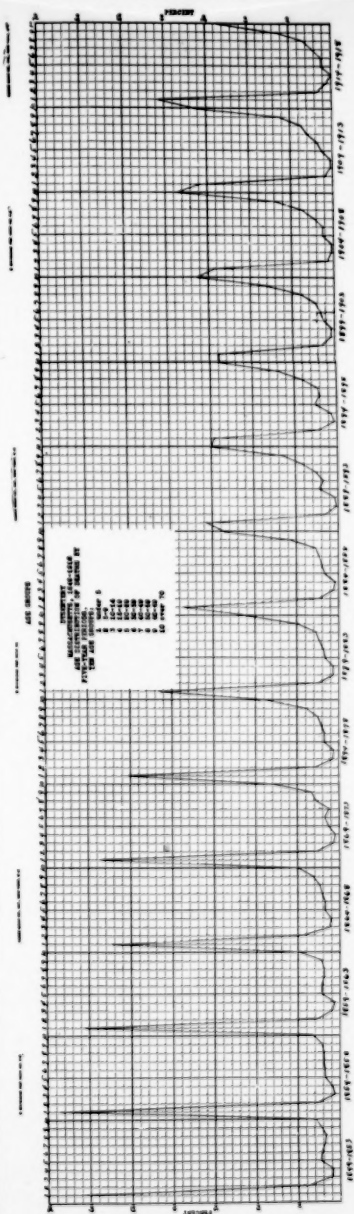


FIGURE 73

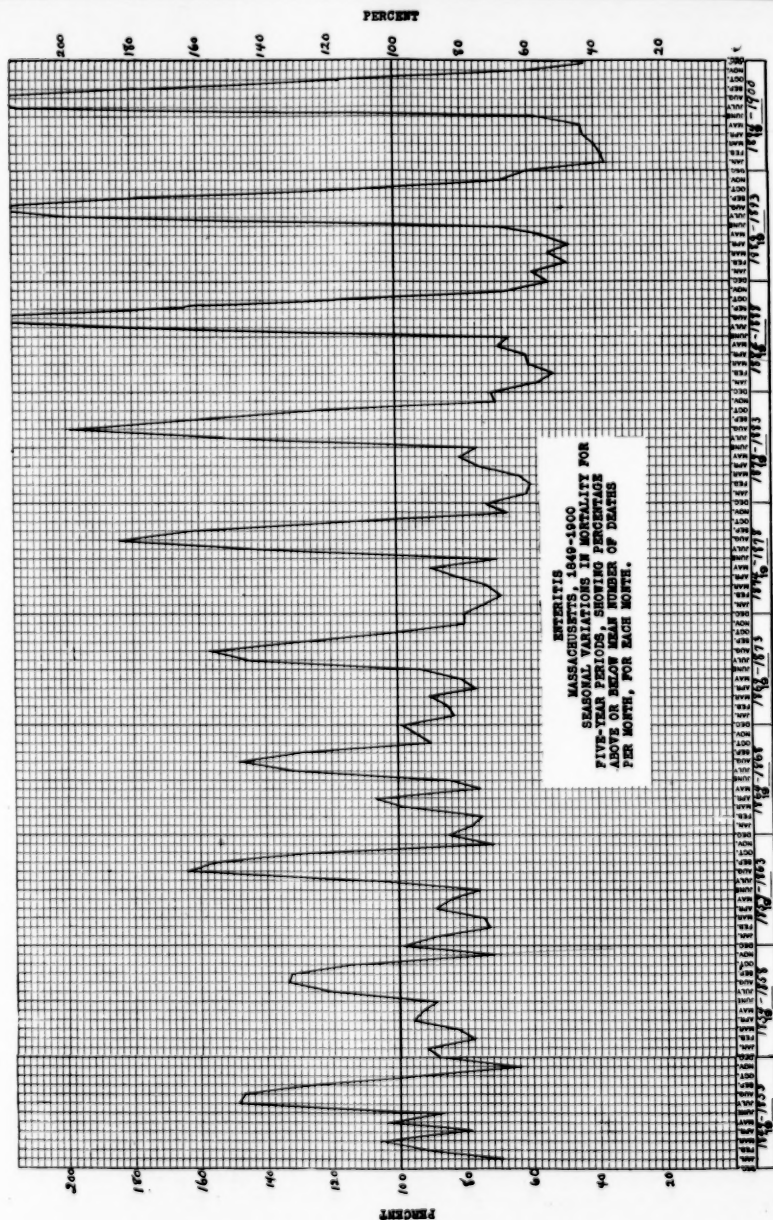


FIGURE 73







TABLE 17

PROPORTION OF MORTALITY FROM CHOLERA AT AGE 10-39

Period	Age 10-39	Period	Age 10-39
1849-1853	46.5%	1874-1878	24.4%
1854-1858	39.7%	1879-1883	21.7%
1859-1863	20.0%	1884-1888	19.2%
1864-1868	22.8%	1889-1893	21.5%
1869-1873	25.2%	1894-1898	19.2%

between the ages of 10 and 39 were typhoid or paratyphoid. Column 7, table 12, shows the actual number of cases added.

(To be continued)

## FIGURES

Figure	Page
71 Dysentery, seasonal variations in deaths.....	746
72 Dysentery, age distribution of deaths.....	747
73 Enteritis, seasonal variations in deaths.....	748
74 Enteritis, age distribution of deaths.....	749
75 Cholera, seasonal variations in deaths.....	750
76 Cholera, age distribution of deaths.....	751

## TABLES

Table	Page
15 Dysentery, proportion of deaths at age 10-39	745
16 Enteritis, proportion of deaths at age 10-39	747
17 Cholera, proportion of deaths at age 10-39	752

POPULATION OF CONNECTICUT 1,572,000  
IN 1925

THE new method of population estimation for United States and States as used by the U. S. Bureau of Census gives Connecticut 1,572,000 compared with the estimate of 1,529,688 for 1925 by the usual method of estimation.

There are several ways of estimating populations for the years following a United States census. The simplest method is called the arithmetical method and the assumption made is that the population increases each year in equal amounts based on the increase between the two previous censuses, and that these increases may be extended beyond the last census year up to the next census. This process of extending estimated populations is called extrapolation.

Until this year this simple method was used by the U. S. Bureau of Census and is still being used in this State for several reasons. First: it is possible to carry the populations as estimated from year to year by age groups. Second: the populations of towns constituting the State may be made to come to the State total. In fact, the increase of the State as a whole is used as a controlling total with which the counties and the several towns within the counties are made to agree.

It is not the purpose of this article to de-

fend this process or method in applying which certain quite arbitrary adjustments must be made. For example, a county total having been determined it will not be expected that the various town populations, when summed, will agree absolutely with this predetermined county total. To make the agreement positive some juggling is necessary—but in no case is it permitted to exceed a fluctuation which might arise from theoretical chance.

When the figures for 1925 were completed the death rate for Connecticut was found to be 11.6 per 1,000 of population as calculated in this department. When the figures as compiled by the Bureau of Census in Washington, D. C., were published the rate was found to be 11.3 per 1,000. Such a discrepancy as this was unexplainable. The only difference which could give this variation must have been in the population, inasmuch as the number of deaths used in this department and in Washington were in substantial agreement, the only variation being the fact that the department had a few late reports not included by the Bureau of Census.

## BUREAU OF CENSUS' NEW METHOD OF COMPUTING POPULATION

A letter to the Bureau of Census brought the reply that populations were being estimated by a new method and that while the Connecticut State Department of Health was using a population of 1,529,688 for 1925, the Bureau of the Census was using, unannounced, a population of 1,572,000.

This figure of 1,572,000 is arrived at by a combination of births, deaths and the effect of the net result of immigration and emigration. The method is to refer everything to the census year of 1920 and to assume that the facts of the Registration Area of the United States are truly indicative of the Continental Area.—*Bulletin Connecticut Department of Health.*

WEEKLY HEALTH INDEX—CONTINUED  
SUMMARY

TELEGRAPHIC returns from 65 cities with a total population of twenty-nine million for the week ending Sept. 18 indicate a mortality rate of 10.9 as against 10.8 for the corresponding week of last year. The highest rate (20.6) appears for Nashville, Tenn., and the lowest (6.0) for New Haven, Conn. The highest infant mortality rate (215) appears for Flint, Mich., and the lowest for San Diego, Calif., and Springfield, Mass., which reported no infant mortality.

The annual rate for 65 cities is 13.6 for the thirty-eight weeks of 1926, against a rate of 12.9 for the corresponding weeks of 1925.



**Case Records**  
of the  
**Massachusetts General Hospital**

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN  
WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY

RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.  
F. M. PAINTER, A.B., ASSISTANT EDITOR

CASE 12411

**A CASE OF HEMATEMESIS**

MEDICAL DEPARTMENT

A widowed American laundress sixty-one years old entered August 18 for the first time complaining of hematemesis.

Seven months before admission she suddenly felt nauseated one evening and then brought up a fair amount of bright red blood. By the advice of her physician she rested a week. Then she went back to work. Two months before admission she had a second similar attack with less blood, only half a pint, and no nausea or feeling of weakness. She went back to work after two days. Eighteen days before admission, soon after being awakened by a fire alarm in the night, she brought up two quarts of bright red blood. She felt weak for a few days. Since that time she had been resting, but had no other symptoms. With one of the hemorrhages she had a "light" feeling in her head. She had tarry stools for two or three days after all the hemorrhages, but at no other time.

Her mother died of heart trouble in old age. Her first husband died of consumption after four years' illness. The patient had never had children. All her life she had been quite healthy. She passed the menopause with no trouble at the age of forty-six. Her weight had been 205 pounds for the last ten years and was 203 eighteen days before admission.

Examination showed a very obese woman with clear pale skin and marked pallor of the mucous membranes, especially the mouth. At the left apex posteriorly there was distant bronchial breathing. Voice sound, no resonance, not increased. Tactile fremitus diminished. The apex impulse of the heart was not found. The heart was enlarged at the arch and in all directions except downward. Percussion accuracy was impossible. The percussion measurements are shown in the diagram. The aortic



second sound was accentuated and snapping. There was a systolic murmur over the left sternum, loudest at the aortic area. The

heart sounds were distant. The blood pressure was 190/100-165/90. The liver edge was felt two centimeters below the costal margin. There was a mass (spleen?) descending with inspiration in the left upper quadrant 4 centimeters below the costal margin. A rounded pole like the spleen or kidney presented. At pelvic examination on the table the uterus filled the left fossa. It was not tender, but seemed larger than normal. (Fibroid?) Inspection showed a normal os. The fingers showed Heberden's nodes. The pupils and reflexes were normal. Fundus examination showed normal discs, sclerosis of the vessels, a small area of hemorrhage and exudate in the nasal side of the right disc.

The amount of urine is not recorded. The specific gravity was 1.021 to 1.020. The sediment showed many leucocytes at all of three examinations, rare red cells at one. Renal function 30 per cent. Blood examination showed 3500 to 4500 leucocytes, hemoglobin 65 to 30 per cent., polynuclears 70 to 49 per cent., reds 2,800,000 to 4,100,000, marked achromia, some anisocytosis and poikilocytosis, no stippling or polychromatophilia; platelets seemed decreased in one of four smears, slightly increased in two later stained with cresyl blue. Reticulated cells .5 to 1 per cent. Clotting time 6-9 minutes. Clot retraction poor in three tubes, good in one. Non-protein nitrogen 30 mgm. Wassermann negative. Icterus index 2. Stools negative to guaiac at five examinations.

X-ray showed slight increase in the transverse diameter of the heart on the left and a slightly tortuous aorta. A barium meal and enema showed no definite evidence of organic disease of the gastro-intestinal tract. There was slight spasm in the sigmoid, but the various portions did not appear abnormal in contour.

Orders: August 18, five-meal gastric diet. Fluids ad libitum. Russian oil one ounce twice a day. August 30, obesity diet. May have fluids.

The temperature was 97.9° to 99.8° with one rise to 101° August 20. The pulse was 71 to 100. The respirations were normal.

The patient's color improved markedly. The increase in blood platelets over normal was notable. September 2 she was discharged.

After leaving the hospital she was followed in the Out-Patient Department by the senior house officer. Her spleen and liver remained at least the same size as at discharge. At one observation a month after she left the hospital they were slightly larger. Two months after her discharge her weight had been reduced by twenty pounds. Her hemoglobin was 60 per cent. and the red count 3,720,000. The blood pressure was 200/90. In November she complained of slight dyspnea. She felt better if she took salts three times a week. At that time she felt well enough to begin working.

One morning in the middle of March, six months after her discharge, she was awakened in the night by a thunderstorm. She was nauseated, and after coughing a little brought up a big mouthful of bright red blood. The next day she had a tarry movement and felt weak. April 26 after breakfast she felt nauseated and brought up her breakfast mixed with what she thought was a mouthful of bright red blood. She had no bowel movement from the time of her last hemorrhage until her readmission to the hospital April 27. She felt weak and thirsty but did not remember fainting. Her memory was now very poor.

On examination she was well nourished, extremely pale, with a slight subicteric tint. The mucous membranes were markedly pale. The lungs were clear. The heart showed no enlargement to percussion. (Supracardiac dullness 4 centimeters, right border 3 centimeters, mid-clavicular line 9 centimeters, left border 8 centimeters.) There was a soft apical systolic murmur. The abdomen was moderately obese, with questionable free fluid. The liver edge was just felt. The spleen was questionable. Rectal examination was negative. The extremities showed no edema. The urine was normal in amount, specific gravity 1.018 to 1.020, the slightest possible trace of albumin at one of five examinations, rare to numerous leucocytes at all but one of five sediment examinations, rare red cells at one. Blood examination showed 6,800 to 4,600 leucocytes, 70 per cent. polynuclears, hemoglobin 30 to 50 per cent., reds 1,560,000 to 3,800,000, moderate achromia, poikilocytosis, anisocytosis, and occasional microcytes. The cells appeared smaller than normal, about one stippled cell per high power field, no nucleated red cells seen. Platelets appeared normal, not increased. Reticulated cells 5 per cent. to less than 0.1 per cent. Icterus index 3-4. Clotting time 9 minutes. Bleeding time 4 minutes. Wassermann negative. Stools: guaiac positive or very strongly positive at all of five tests to May 6, negative May 7, very strongly positive May 9, negative at three later tests. Rosenthal bromsulphalein test normal.

X-ray examination with a barium meal was made in the recumbent position only. There was slight flattening of the first portion of the duodenum. There were no filling defects to suggest organic disease of the stomach or duodenum.

Consultants: Internist. "I can see no indication for operation. Do not believe she has any type of primary blood condition. Spleen just palpable at costal margin. Liver down two fingers. Both liver and spleen smaller than in September. The most probable diagnosis seems to me to be malignancy of the stomach in spite of negative X-rays and negative gastric history. Transfuse now and re-X-ray soon."

Surgeon. "I cannot make a diagnosis in this case. Malignancy does not seem probable. I cannot feel the spleen or liver. . . . It would seem hardly justifiable to do a splenectomy on the evidence we have at present."

The temperature was 97.9° to 100.4°, the pulse 70 to 111, the respiration not remarkable.

The patient had no more bleeding. May 5 surgical transfusion of 600 cubic centimeters of whole blood was done. A laryngologist advised against esophagoscopy.

May 20 the patient ate her supper as usual, and at the rounds at 6:45 was feeling very well. At 7:45 she suddenly brought up 450 cubic centimeters of fresh blood mixed with her supper. Ten minutes later the pulse was 96, the blood pressure 150/65. There was no evidence of shock. She was given a quarter grain of morphia. At 8:25 she vomited 400 cubic centimeters more of blood. She looked washed out, but was not in shock. May 21 she bled 500 cubic centimeters more. 600 cubic centimeters of blood was transfused. May 22 she vomited about 1000 cubic centimeters of bright red blood and two hours later 800 cubic centimeters more. After having the situation fully explained to them the patient's relatives decided to have no more transfusions done. May 23 the patient again vomited six ounces of blood. May 24 she died.

#### DISCUSSION

BY RICHARD C. CABOT, M.D.

#### NOTES ON THE HISTORY

What is the commonest cause of the vomiting of blood without previous symptoms?

A PHYSICIAN: Cirrhosis of the liver.

DR. CABOT: Right. When hematemesis comes with no previous symptoms, as we say "out of a clear sky," cirrhosis of the liver is the commonest cause. Probably this will not be cirrhosis of the liver, but that is the right thing to think of as the commonest cause.

Two quarts of blood is a great deal, if it is so. It is very easy to get mixed up with stomach contents etc.

DR. RICHARDSON: Have you ever known anyone to live after losing two quarts of blood?

DR. CABOT: Yes, we know from the war that people have lived after bringing up two quarts of blood. It is really striking how little these hemorrhages pulled her down. We could not have a case more illustrative of whatever turns out to be the cause of hematemesis in a person of perfectly good health, without any previous symptoms. Suppose one came to the bedside of a person who had just vomited two quarts of blood. Suppose one took the hemoglobin and found it normal. How soon should one expect it to go down? It takes forty-eight hours to

get the blood diluted with the tissue fluids so that the patient is anemic. We saw that very often in the war. People lost a lot of blood, and yet the hemoglobin was perfectly normal.

Distant bronchial breathing on the left is much more significant than if it was on the right. Accuracy of thoracic percussion is always impossible, perhaps a little more here than usual.

Of course if we are thinking of cirrhosis, as we are, and if this abdominal mass is spleen, that supports the diagnosis, because the spleen is usually enlarged in cirrhosis of the liver.

The fundus of the eye shows what we should expect with high tension at her age.

This is one of the cases of apparently fixed gravity of the urine, at a high point, which has no significance in my opinion. We are not told whether these were catheter specimens.

MISS PAINTER: There is no record that they were.

DR. CABOT: So we shall disregard these statements as to the sediments. There was no albumin and no sugar, and I suppose nothing important in the sediment.

The leucocyte count is below normal, and that is characteristic of one disease which shows an enlarged spleen and sometimes other symptoms like these.

A PHYSICIAN: Typhoid fever.

A PHYSICIAN: Splenic anemia.

DR. CABOT: Splenic anemia is what I had in mind,—or Banti's disease, which is indistinguishable from cirrhosis in many cases. There is no evidence of active regeneration on the part of the marrow, which is what stippling and polychromatophilia show. Cresyl blue is the stain we use for reticulated cells. That is normal here.

Let us sum up what we have so far. We have a woman who comes in for vomiting blood. We find a big liver and a big spleen, and I presume no ascites demonstrable. We have a high blood pressure, we have a big heart, we have a normal urine, we have an apparently secondary anemia of considerable severity. We have no evidence in the blood of any attempt at regeneration. I do not know why not. X-ray shows nothing of importance. We have ruled out so far as we can any organic disease like cancer or ulcer of the stomach.

What diagnosis did they make at the time of her first stay in the hospital? I think they made a diagnosis of Banti's disease or splenic anemia, because of the conditions in the blood and the way the disease started. It is never a very satisfactory diagnosis. We are never sure that it is not cirrhosis of the liver.

The word "hypertrophic" is not one that is used now in speaking of cirrhosis. Alcoholic cirrhosis of the liver may give a big liver, a normal sized liver, or a small one. Biliary cir-

rhosis, the so-called Hanot's disease, may give a large liver or one of normal size. So that the term "hypertrophic" has no significance. In most cases of cirrhosis that I have seen the liver has been big. There is overgrowth and fat and regenerative tissue, so that the whole organ is big.

The best diagnosis I can make is cirrhosis of the liver or Banti's disease, leaning toward the latter. I do not make any distinction between Banti's disease and splenic anemia.

Blood pressure measurements in the Out-Patient Department showed quite a big pulse pressure.

At the time of the thunderstorm probably most of the blood went down instead of coming up.

She came back to the hospital after her third hemorrhage.

#### NOTES ON THE SECOND PHYSICAL EXAMINATION

Nothing more is said about the left apex, which was queer before. It just blew away I suppose.

It is not likely that her heart got smaller. Hearts do not do that. Either the first percussion was wrong or the second was wrong, or they were both wrong, as most percussion is.

It is pretty hard to tell about fluid sometimes in a thick-walled abdomen.

The anemia is a good deal worse than before, even though she brought up only a little blood. A lot must have gone the other way. One stippled cell per high power field is a good many. Five per cent. reticulated cells is great increase over the normal.

The Rosenthal test is for liver function.

We have a bad slang phrase here, "blood condition." It means "blood disease", and we ought to say so.

The internist had good nerve to assert that cancer of the stomach is present when the X-ray is negative, but that has happened. Most malignancy which X-ray misses is on the posterior wall.

They wanted to see if they could see any varicose veins at the root of the esophagus. But the wise laryngologist knew that esophagoscopy has in itself some risks. So the satisfaction of intellectual curiosity which we sometimes push too far was foiled here, I am glad to say.

#### DIFFERENTIAL DIAGNOSIS

This is a queer case. What do you think of it?

A PHYSICIAN: I think it is malignant disease.

DR. CABOT: I will take the field against that.

A PHYSICIAN: An esophageal varix?

DR. CABOT: That is probable.

A PHYSICIAN: How about an abdominal aneurysm?

A PHYSICIAN: The Wassermann was negative.

DR. CABOT: Did anyone ever know of an abdominal aneurysm that broke into the stomach?

DR. RICHARDSON: Yes. They may break into the stomach, the duodenum or the colon; but they commonly break into the retroperitoneal tissues.

DR. CABOT: We have to say in the first place that abdominal aneurysm is very rare. We had only four or five in the last 4000 necropsies. The next thing is that I never knew it to break into the stomach.

A PHYSICIAN: The stomach was adherent.

A PHYSICIAN: Wouldn't that be the end of things when it did break?

DR. CABOT: I should suppose so; and that is the best evidence against it. I am willing to bet against abdominal aneurysm.

A PHYSICIAN: Ulcer of the stomach?

DR. CABOT: How many think ulcer of the stomach? Cancer of the stomach? Cirrhosis of the liver? Banti's disease?

I do not think it is gastric disease, either ulcer or cancer. I still am in doubt between the two I spoke of in the beginning. As she is a woman and probably did not have an alcoholic history I would rather assume Banti's disease than anything else. But I think the chances are it is something none of us has thought of at all.

This is a seven-foot X-ray plate, taken to show the actual size of the heart. The tortuous aorta means nothing. It used to be mistaken for aneurysm of the aorta in the early days of X-ray work. I should think the transverse diameter of the heart was big. As we have a high blood pressure I think there will be hypertrophy and dilatation of the heart depending on the hypertension, having so far as I know no particular relation to the patient's death.

MISS PAINTER: The chest was twenty-seven and the total diameter of the heart was 14.2.

DR. CABOT: 14.2 is more than half of 27. Therefore the heart is big. That is the rule here.

I do not see anything wrong with this X-ray of the lungs. The diaphragm and the bubble underneath are normal.

#### CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Cirrhosis of the liver.  
Esophageal varices.  
Hypertension.  
Transfusions.

#### DR. RICHARD C. CABOT'S DIAGNOSIS

Banti's disease, or  
Cirrhosis of the liver.  
Esophageal or gastric varices.  
Hypertension.  
Hypertrophy and dilatation of the heart.

#### ANATOMICAL DIAGNOSIS

##### 1. Primary fatal lesions

Cirrhosis of the liver.

##### 2. Secondary or terminal lesions

Varices of the esophagus and stomach.  
Hemorrhage into gastro-intestinal tract.  
Anemia.  
Hypertrophy of the spleen.  
Edema of the lungs.

##### 3. Historical landmarks

Arteriosclerosis.  
Hypertrophy and dilatation of the heart.  
Slight chronic pleuritis, right.  
Chronic salpingitis.

DR. RICHARDSON: The skin and mucous membranes were very pale. There was no evidence of icterus. In the right cubital space was a short sutured wound. There was a large amount of subcutaneous fat. The peritoneal cavity was negative; no ascites. The appendix was negative except that the tip was bound down by old adhesions on the right side of the peritoneal cavity in the region of the tube and ovary; that is, there was some chronic salpingitis with the appendix tip bound down by the adhesions.

Along the lower two-thirds of the esophagus there were irregular rows of varices, and the tube contained much thin pale blood. The stomach also contained much thin blood and old blood-clot-like material, and there were some varices in the stomach, but not so marked as in the esophagus. The intestines showed rather thick, somewhat elastic walls, the vessels injected, but were otherwise negative. In the large intestine the fecal material was blackish red, apparently mixed with blood.

The liver was two centimeters above the costal border. The diaphragm on the right was at fourth rib, on the left at the fifth rib. That locates the liver, which weighed 1459 grams, if anything rather small for her.

There were a few pleural adhesions on the right at the apex. The lungs were pale, spongy, and showed much edema.

The heart weighed 490 grams. That is considerably enlarged for her. The valves and the myocardium were negative. The coronaries showed a moderate amount of sclerosis, but were free and fairly capacious. The ascending thoracic aorta showed a very slight amount of fibrous sclerosis, but the rest of the aorta showed much fibrous and fibrocalcereous sclerosis, and in places areas of atheroma. The great branches of the aorta showed a slight amount of fibrous sclerosis. So that we have a hypertrophied and dilated heart and the amount of arteriosclerosis mentioned. There was but little blood in the heart cavities.

The liver weighed 1459 grams and showed frank cirrhosis. The peritoneum in the region of the liver showed a vascular meshwork.

The spleen weighed 600 grams, considerably enlarged, with smooth surface and elastic brown-red tissue.

The kidneys weighed 270 grams, the markings and tissue generally negative, except that they were very pale.

The uterus and adnexa were negative except for the chronic salpingitis mentioned.

DR. CABOT: Suppose a cantankerous person wanted to maintain against you that that was Banti's disease, how would you differentiate it?

DR. RICHARDSON: The amount of cirrhosis with so-called Banti's disease, as far as we have seen it here, is comparatively small in extent, with no such accompanying picture of cirrhosis, bleeding and varices.

DR. CABOT: Many of the descriptions of Banti's disease speak of varices, the hemorrhages and the whole picture that we see here. I do not see how the distinction can be made between cirrhosis of the liver and Banti's disease.

A PHYSICIAN: If you did not have a necropsy what should you say was the cause of death?

DR. CABOT: Banti's disease.

A PHYSICIAN: Not esophageal varices?

DR. CABOT: What they want is the main cause, and I think that was Banti's disease.

A PHYSICIAN: Why such extensive hemorrhage in cirrhosis?

DR. RICHARDSON: The varices have very thin walls, which break.

DR. CABOT: The vessels of the stomach should drain down through the liver. If they do not drain through the liver because it is blocked, they become varicose, break and bleed.

A PHYSICIAN: Why such extensive hemorrhage in such a few hours?

DR. RICHARDSON: Because of the extensive varices.

A PHYSICIAN: In any cirrhosis do you have varicosity of the stomach veins?

DR. RICHARDSON: Yes; more or less varicosity of all that part of the venous blood supply.

DR. CABOT: Is it more in the gullet than it is in the stomach?

DR. RICHARDSON: As they come to necropsy here, yes.

A PHYSICIAN: What is the greatest help in the diagnosis of peptic ulcer?

DR. CABOT: The first is the history and the second X-ray. She did not have gastric symptoms. The usual case has gastric symptoms. I should say we must have either gastric symptoms or an X-ray. If we do not have either I can not make the diagnosis.

DR. RICHARDSON: In the cases called Banti's disease here the outstanding things have been

the enlarged spleen and anemia. The spleen in this case weighed 600 grams, and there was some increase of interstitial tissue. There was marked cirrhosis of the liver, and a spleen of that nature might go with it.

DR. CABOT: The ordinary conception of Banti's disease is a trouble which starts with enlargement of the spleen. If that is removed it can be cured. If it is not removed there is progressive cirrhosis of the liver. It is a question how long the patient can live without hemorrhage cutting short life. But cirrhosis of the liver always has a big spleen too, and how big it shall be with straight cirrhosis and how small with Banti's disease there is no way of saying. We never shall get anywhere in this point of differential diagnosis on the basis of big spleen and ascites, because we have no conception of the cause of either disease, except I believe that alcohol has a good deal to do with cirrhosis.

A PHYSICIAN: Is syphilitic cirrhosis common?

DR. RICHARDSON: Not in the material here.

A PHYSICIAN: In cases of cirrhosis are hemorrhages not so liable to occur in the hypertrophic stage as in the atrophic stage?

DR. CABOT: That is not my impression. It may be true. Your question implies the familiar idea that the cirrhotic liver starts big and gradually gets smaller, that the early stage is an enlarged liver and the later stage a small one. I do not believe there is any good evidence for that. Nobody has ever watched the liver get smaller. We find big livers at the end; we find small livers at the end; and I do not know that the liver goes through the stages of big, normal, small. Neither do I know of any particular relation of hemorrhage to the big livers and small livers.

A PHYSICIAN: Anatomically how do you differentiate Banti's disease from Gaucher's disease?

DR. RICHARDSON: They probably belong to the same group. In Gaucher's cases there is a very large spleen and the sections show hyperplasia of the endothelial cells of the blood sinuses and to such an extent that some regard it as a tumor. But these changes in the spleen of interstitial increase and hyperplasia of the follicles and of endothelial cells occur in varying extents in all of the spleens of the group.

A PHYSICIAN: To what extent does the presence of ascites differentiate between the two conditions?

DR. RICHARDSON: I thought at one time that I had a method which would differentiate between the kinds of cirrhosis,—that one had ascites and the other had icterus. Unfortunately there are cases that have both, and I gave it up.



## CASE 12412

X-RAY THERAPY IN A CASE OF LYM-  
PHOBLASTOMA (MALIGNANT LYM-  
PHOMA) WITH INVOLVEMENT OF  
THE STERNUM AND MARKED PRURI-  
TUS

## ROENTGENOLOGICAL DEPARTMENT

*First entry.* An Armenian of forty-nine was first admitted to the hospital on June 7, with the complaint of generalized itching of the skin, swelling under the left arm, slight pain on moving this arm, a lump behind the right ear, and weakness of the hands.

*Family history* unimportant except that one of four children was stillborn.

*Past history.* Previous to the onset of the present illness his general health had been excellent. There had been no acute or chronic disease except a chancre at the age of thirty. He complained of chronic constipation and of nycturia.

*Present illness.* Two years before admission he began to have pain in the right axilla on moving the arm, and at about the same time swelling of the axillary glands. Three months later a similar condition appeared in the left axilla, though the pain was never so severe as on the right. Concomitantly he began to have considerable trouble with a right inguinal hernia. Because of the symptoms he gave up his work as a dipper in a brass foundry. On November 4 he was seen in the Out Patient Department of the Massachusetts General Hospital. The blood Wassermann was found to be strongly positive, and a course of six arsphenamin injections was given over a period of a month and a half. Mercury treatment was also prescribed. At this time a small gland was removed from the neck for diagnosis. Microscopic examination showed a node composed of large and small atypical cells of the lymphocyte series, infiltrated with eosinophilic leucocytes. Well marked fibrosis. Normal markings of lymph node not present. Pathologist's diagnosis: Malignant lymphoma.

While taking the antilietic treatment a marked pruritus developed, most pronounced over the extremities. Shortly after this the patient was operated on at another hospital for the hernia, with complete relief.

*Physical examination* showed a well nourished man walking about the ward and complaining of generalized itching. There were excoriations scattered over the upper trunk and arms. The skin was soft and smooth. There was an area of purplish pigmentation at the flanks; the throat showed slight general injection; the breath was foul. There was some limitation in motion of the neck without pain or obvious cause. Two discrete glands were palpable in

the left axilla the size of English walnuts together with several smaller ones. There was redness over the site of one of these and a small sinus from which yellowish material could be expressed. No glands were felt in the right axilla. Scattered almond-sized firm discrete glands were present on both sides of the neck. There was a chain of glands in each inguinal region, discrete, firm, varying from the size of a hickory nut down. At the left of the xiphoid was a bulging 6 centimeters in diameter and about 1 centimeter in thickness. The heart was slightly enlarged, the sounds distant. Blood pressure 120/70. Lungs normal. The liver was felt with difficulty 2.5 centimeters below the costal margin. The spleen was easily palpable, 4.5 centimeters below the costal margin. Genitals, extremities and reflexes normal. The right pupil was smaller than the left; both were slightly irregular; their reactions were sluggish. Temperature ranged from 97.5° to 99.8° with one brief rise to 101°. Pulse 65 to 104. Respiration 18 to 31.

*Laboratory Exam.* Urine: normal amount. Specific gravity 1.021 to 1.009. Occasional leucocytes and rarely a red blood corpuscle. No albumin or sugar. Renal function 30 per cent. Blood: hemoglobin 80 per cent., leucocytes 10,700-30,300, polynuclears 86%-61%, slight to moderate achromia at three of seven examinations; at the third there were large leucocytes with large irregular nuclei and finely granular cytoplasm not typical of large mononuclears, at the fourth about 25% of lymphocytes of large type, at the fifth an occasional large lymphocyte with bipolar nucleus, perhaps blasts, broken cells, basket cells seen frequently in fields; at the sixth the large mononuclears did not appear typical, cells with granular cytoplasm and large irregular nuclei. Wassermann moderately positive. Stools. Guaiac strongly positive at one of two examinations. Lumbar puncture. 10 cubic centimeters of clear colorless fluid. Pressure, initial 180 millimeters, after withdrawal of 5 cubic centimeters 120, after withdrawal of 5 cubic centimeters more 110. Hydrodynamics normal. Cell count 2. Alcohol moderately positive. Ammonium sulphate positive. Wassermann negative. Total protein 38. Goldsol 0000000000. Biopsy June 11. A plum-sized node with a pale yellow surface on section. A microscopic examination showed a tumor composed of large atypical cells of the lymphocyte series infiltrated with leucocytes, many of them having eosinophilic cytoplasm. Areas of fat-holding mononuclear cells occurred, and there was considerable fibrosis. Malignant lymphoma. X-ray. General increase in the mid-shadow, most marked in its upper portion. The shadow was dense, with sharply defined margins. Lung fields clear. No limitation of respiratory movements of the diaphragm.

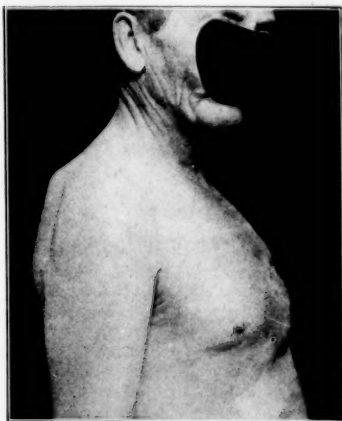
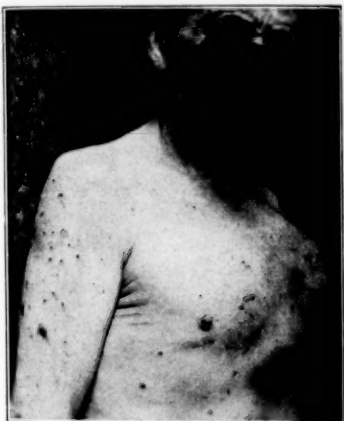


Hilus shadows somewhat increased on both sides. Larger lung markings dense and mottled.

*Therapy.* Zinc oxide, calamin and starch baths were prescribed for relief of the pruritus. Sedatives: veronal, sodium bromide and an occasional small dose of morphine. Referred for X-ray treatment June 25. High voltage irradiation was applied to the chest while the superficially enlarged glands were treated with aluminum filtered X-ray. A month later, July 28, the patient returned for observation. One large gland was found in the left axilla and several occipital nodes were enlarged. The tumor of the anterior chest wall had practically disappeared. The general condition was much im-

proved. The sternal mass has fully doubled in size since the last observation. The skin in places over it is red and tense, and looks as though it might easily break down. There is a horsechestnut-sized gland in the left neck, which also presents a tense, shiny skin surface above. There is a large mass in the left axilla; very little in the right axilla. The skin over the entire body is covered with excoriations from scratching." X-ray treatment was promptly given, the sternal tumor quickly subsided, the pruritus cleared up and the superficially enlarged glands disappeared. The general condition remained fairly good until January, when the patient began slowly but steadily to lose ground. Several masses appeared over the chest wall, and the pruritus became extremely annoying. There was practically no response to irradiation. On May 3 the following note appears on the record: "Patient has been in bed most of the time since

might be of a gummatous nature. A specimen was removed from the tumor March 27. The microscopic appearance was practically identical with that seen in the axillary gland removed several months previously. There was no evidence of leues. The operative wound was very slow in healing and in fact did not close until very heavy irradiation had been applied to the anterior chest wall. The patient was kept in fairly good condition by frequently repeated X-ray treatments until the following August.



Lymphoblastoma of sternum, showing marked improvement four weeks after short wave irradiation.

proved and the pruritus had practically disappeared. The enlarged occipital nodes were irradiated at this visit. A month later, August 27 these nodes had disappeared, but there was considerable swelling and stiffness of the right neck. Blood examination on this date showed 6,400 leucocytes, 69 per cent. polymorphonuclears, 22 per cent. lymphocytes, 3 per cent. neutrophils, 1 per cent. eosinophils, 5 per cent. large mononuclears.

The patient reported at intervals, of two to three weeks until October 22, when he was lost track of. He appeared again the following March, presenting two large firm masses along the left border of the sternum. Glands in both axillae. General condition much worse than at last observation. He was admitted to the hospital for study of the sternal tumor. In view of the luetic history it was believed that this

to work. The sternal mass has fully doubled in size since the last observation. The skin in places over it is red and tense, and looks as though it might easily break down. There is a horsechestnut-sized gland in the left neck, which also presents a tense, shiny skin surface above. There is a large mass in the left axilla; very little in the right axilla. The skin over the entire body is covered with excoriations from scratching." X-ray treatment was promptly given, the sternal tumor quickly subsided, the pruritus cleared up and the superficially enlarged glands disappeared. The general condition remained fairly good until January, when the patient began slowly but steadily to lose ground. Several masses appeared over the chest wall, and the pruritus became extremely annoying. There was practically no response to irradiation. On May 3 the following note appears on the record: "Patient has been in bed most of the time since

last observation. He has finally managed to get in, although he is so weak that it is impossible for him to stand alone. He also appears very anemic. There are two large tumor masses on the anterior chest, one at the junction of the left clavicle with the sternum and the other low down on the chest in the region of the xiphoid. These masses measure about 4 centimeters in diameter and are firm and rubbery in consistency. There is a similar large mass in the left inguinal region. Patient has been having symptoms of intestinal obstruction, and there is a continuous mucoid discharge from the rectum. Given a short X-ray treatment and referred to the wards for more thorough examination and further therapy." May 5. "Patient became unconscious during treatment. Pulse was very weak and thready. Also had slight convulsion. Believe it will be unwise to give further treatment to this case." May 13. "Patient continues to grow slowly worse. Do not see how he can live more than a few weeks at the outside. Doubt whether further X-ray will be of any value in this case."

The patient died August 2, two months and a half after the last note.

#### DISCUSSION

BY RICHARD DRESSER, M.D.

There are several features in this case which are worthy of special note. One must keep in mind the fact that lymphoblastoma may involve practically any tissue in the body. While there is generally, though not always, a certain amount of enlargement of one or more groups of superficial lymph nodes, the text-book picture of a huge cervical adenopathy is relatively uncommon. The involvement of bone is, in our experience, an infrequent manifestation of the disease, but this possibility should not be overlooked. Osseous involvement may occur as a direct extension of the disease from contiguous lymph glands, or may be in the nature of a metastatic process.

Pruritus is often noted as a symptom of lymphoblastoma; in the case at hand it was the patient's chief complaint.

It is often stated that the glands in this disease do not become soft and fluctuant, and tend to break down. As we have seen, there are exceptions to this rule.

The response to irradiation is characteristic. The symptoms can usually be controlled for a period of from one to five years, but there comes a time when the treatment is no longer effective. The outcome is almost invariably fatal. Since irradiation is only a palliative measure, it should be administered in a manner which causes the patient the least possible discomfort.

#### DIAGNOSIS

Lymphoblastoma (malignant lymphoma) of the sternum, with marked pruritus.

#### CASE 12413

THE PENALTY OF DELAY IN INSTITUTING ADEQUATE TREATMENT OF A LESION OF THE LIP

#### SURGICAL DEPARTMENT

An American painter of forty-eight entered May 14 for diagnosis and treatment of a "cold sore" on the lip of twelve months' duration. His mother died of cancer of the stomach. His wife had had two miscarriages. Twelve years before admission he had some illness in which his cheeks became swollen. Venereal disease he denied. He stated that he usually weighed 148 pounds, but was eighteen pounds heavier two years before admission.

One year before admission he noticed a small sore on his upper lip. His doctor applied iodine and then vaseline. Six months ago the sore "re-appeared" in the same place, this time somewhat painful. A salve was applied and during the past four months he had had X-ray treatments.

He was well nourished. Teeth rotten. Pyorrhea. Genitalia negative.

On the right side of the upper lip there was an ulcerated oval area about one and one half centimeters, with an irregular edge. It perforated the lip. At the periphery there was an extensive red induration. This spread up into the right nostril and up the right cheek. Beneath the jaw, on each side of the chin, there was an intensely hard, non-tender swelling the size of a small walnut. Glands anterior to the sternomastoid were palpable on either side. One Wassermann was negative.

Before operation the temperature and respirations were normal, the pulse 80 to 90. The urine showed a trace of albumin at one of two examinations.

#### DISCUSSION

BY WILLIAM M. SHEDDEN, M.D.

His mother is said to have died of cancer of the stomach. It is interesting to note that in Case 11402, in which the diagnosis was the same, two daughters of the patient were said to have died of cancer of the stomach.

Tuberculosis of the lip can almost be excluded here because (1) the lesion is single, which is unusual in tuberculosis; (2) it is extensive and deep, while a tuberculous lesion in this area is nearly always superficial.



PLATE I\*. Grade I epithelioma of the lip showing marked differentiation: a, completely differentiated area; b, partially differentiated cells; c, normal epithelium.



PLATE II. Epithelioma of the lip not showing so much differentiation as in epithelioma shown in Plate I: a, completely differentiated area or pearly body; b, undifferentiated cells.

\*This plate and the two succeeding plates are taken from an article by A. C. Broders in the Journal of the American Medical Association, March 6, 1929.

This ulcer has grown rather more slowly than one would expect with a chancre. He denies venereal disease and the Wassermann is negative, but of course one negative Wassermann does not exclude syphilis, and the two miscarriages of his wife might have been caused by the treponema.

This patient is forty-eight. We commonly think of the age forty-five as being the dividing line between tuberculosis and cancer, neoplasm being much more common after that age and tuberculosis before.

In a recent review of two hundred and sixty-

X-ray treatment was started, but it was evidently quite inadequate. In the series mentioned above there was an average delay between onset and admission to this hospital of approximately forty-eight weeks. In the series of Simmons and Daland the delay is the same. We therefore are not getting them to the hospital any earlier than in 1922. In our series the patients were responsible for thirty-six weeks' delay; but the doctors held them back for twelve weeks more. These cases received various types of treatment before entrance, most of which did no good and caused a dan-

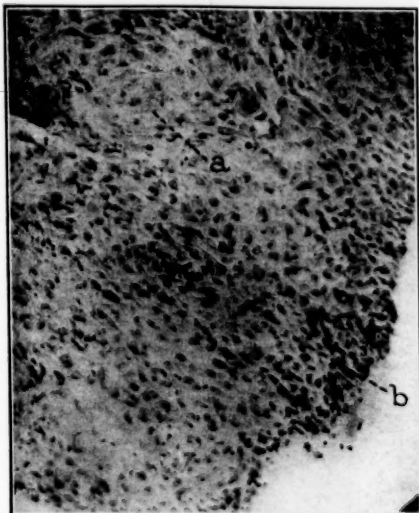


PLATE III. Grade III epithelioma, slight differentiation: a, partially differentiated cells; b, undifferentiated cells.

six cases of cancer of the lip, including one hundred and seventy-two cases described by Simmons and Daland in 1922, we found only seven, or approximately three per cent., in which the tumor was on the upper lip. Besides the case we are now discussing we had two others in our series. One, a man, showed three distinct lesions of proved cancer, one on the right upper lip, one near the center and a third on the lower lip. The other case, a woman, had a single tumor on the upper lip.

The most important single fact about this case is that he waited between six and twelve months from the time of the first appearance of the ulcer until he presented himself here for treatment. But in this the doctors were at fault as much as the patient. They watched along a chronic sore which refused to heal for over a year and prescribed iodine and vaseline. It is true that four months before admission

gerous delay. Violet ray, electricity, pastes, mouth washes, salves, iodine, caustics, X-ray and radium are a few that have been employed.

As regards the use of the last named agent in the treatment of a chronic tumor or ulcer of the lip, we feel that it should *only* be employed in clinically primary precancerous lesions, and it is much safer, if one is in doubt, to excise the lesion with a simple V and with a good margin and send the specimen for pathological examination. The burden of responsibility as to the patient's future rests squarely on the man who advises treatment other than surgery for a chronic tumor or ulcer of the lip. By chronic we mean a lesion of this type that has persisted more than three weeks.

We know that seven per cent. of the patients in Group II and thirty-three per cent. in Group III will metastasize, and that in our series those dead of recurrent cancer had growths thirty-

one per cent. of which were in Group II and sixty-nine per cent. in Group III. Are we justified therefore in merely radiating a growth that is a questionable cancer without knowing whether it is pathologically relatively non-malignant, mildly malignant or very malignant? We feel very strongly that a neck dissection should be done in these last two groups.

Whether we should employ a bilateral or a unilateral neck dissection seems to us to depend on the position of the tumor. If it lies medial to a point half-way between the commissure and the midline a bilateral dissection had better be done, and usually, judging from the position of neck recurrences, it needs only to be an anterior triangle dissection as low as the bifurcation of the carotid.

His teeth were rotten and he had pyorrhea. Approximately eighty-nine per cent. of the lip cancer cases that are admitted here have teeth described as "bad". This condition and the fact that most of these cancers of the lip are secondarily infected is enough to account for many of the cervical glands which are described as enlarged. The glands here are "intensely hard", which probably means cancer. The red induration suggests secondary infection, probably of a low grade.

#### HISTORY. CONTINUED

May 17, under local anesthesia, a specimen was excised for diagnosis. Pathological examination of this specimen showed cancer. May 20 the growth was excised with a wide margin and a plastic operation was done. The neck was not dissected.

His convalescence was uneventful, the face healed, and June 9 he was discharged. A later note records that he died in May of "cancer of the face".

#### FURTHER DISCUSSION

Undoubtedly the reason why they did not excise the tumor radically at the first operation was that they desired if possible to save him a rather mutilating operation; but on the evidence presented the diagnosis seemed fairly certain.

The neck dissection was probably not done because they felt that with several hard glands the hope of cure was too slight to warrant it. However, in the review of the cases above-mentioned there were cures in forty-two per cent. in which glands were removed that showed cancer under the microscope.

The report of death from "cancer of the face" probably means glandular as well as local recurrence, for in the inoperable cases seen where a previous neck dissection had not been done the recurrence has practically always been in the glands.

Dr. H. F. Hartwell very kindly reviewed the pathological specimen in this case and placed it in Group III, the highly malignant group, as

described by Broders in 1920 and by Simmons and Daland in 1922. In this group there is little or no differentiation of cells, usually several mitotic figures, and often infiltration of the surrounding tissues. The prognosis in this group is distinctly bad. In our series we found that sixty-nine per cent. of those dead of cancer were in this highly malignant class. We found also that of the Group III cases which had neck dissection as well as local excision one-third showed metastatic cancer.

It is important therefore to do a neck dissection with these lip tumors unless the lesion is clinically precancerous and pathologically in Group I, or a keratosis; for in our series, where the incomplete operation was done *thirty-one per cent.* died of recurrence, as against *thirteen per cent.* where the more radical operation was employed.

#### DIAGNOSIS

Carcinoma of the lip.

#### POSTURAL DRAINAGE

[Several inquiries have been sent us concerning postural drainage, mentioned by Dr. Randall Clifford in his discussion of Case 12362, published September 9, 1926. At our request Dr. Clifford has sent the following additional notes.]

The object of postural drainage is to aid the patient to get rid of the secretions in the lung. This may be carried out in several ways. One of the best methods for bed patients is to elevate the foot of the bed 30 to 40 centimeters. This position may be assumed for two or three hours every morning and evening. It is also well to have the patient lie with his head to one side to favor expectoration.

Another method is that of partial inversion. In this method the patient is instructed to hang out over the edge of the bed several times during the day face downward with the hands resting on the floor, or to assume the Trendelenburg position. The knee-chest position may also be used.

The alternation of position causes secretions to gravitate into a more normal part of the bronchus, and the reflex of cough does the rest. It is important that this procedure should be carried out regularly and frequently, and the patient soon finds that posture which brings him the best results.

The method is best used in cases where there are large amounts of sputum, or cavities connecting with a bronchus situated in the lower lobes of the lung. Frequent drainage and evacuation of secretions does a great deal in avoiding stagnation which might otherwise occur, with the result that there is less toxemia, greater comfort to the patient, not infrequently a marked reduction in cough, and general improvement in the condition of the patient.

## THE BOSTON Medical and Surgical Journal

Established in 1828

Published by The Massachusetts Medical Society under the jurisdiction of the following-named committee:

For three years HOMER GAGE, M.D., Chairman  
EDWARD C. STREETER, M.D.  
EDWARD V. TAYLOR, M.D.  
For two years WILLIAM H. ROBERT, JR., M.D.  
ROGER I. LEE, M.D.  
ROBERT B. OSSGOOD, M.D.  
For one year JOHN W. HARTIG, M.D.  
HORACE D. ARNOLD, M.D.  
CHANNING FROTHINGHAM, M.D.

### EDITORIAL STAFF

DAVID L. EDGALL, M.D.  
REID HUNT, M.D.  
FRANCIS W. PLUMB, M.D.  
JOHN P. SUTHERLAND, M.D.  
GEORGE R. MINOT, M.D.  
FRANK H. LAHEY, M.D.  
STEPHEN REIDMIRE, M.D.  
HANS ZINSSER, M.D.  
BENJAMIN WHITE, Ph.D.  
HENRY K. VETS, M.D.  
ROBERT N. NYE, M.D.  
SHIELDS WARREN, M.D.

WALTER P. BOWERS, M.D., Managing Editor

### ASSOCIATE EDITORS

GEORGE G. SMITH, M.D.  
WILLIAM B. BREDT, M.D.  
JOSEPH GARLAND, M.D.

SUBSCRIPTION TERMS: \$6.00 per year in advance, postage paid for the United States, \$7.50 per year for all foreign countries belonging to the Postal Union.

Material for early publication should be received not later than noon on Saturday. Orders for reprints must be sent to the Journal office, 126 Massachusetts Ave.

The Journal does not hold itself responsible for statements made by any contributor.

Communications should be addressed to The Boston Medical and Surgical Journal, 126 Massachusetts Ave., Boston, Mass.

### RESEARCH IN TUBERCULOSIS

THE National Tuberculosis Association has for five years had in effect a highly organized plan for coöperative research—a plan that is designed to employ most efficiently the various resources of the Association. This plan has been fully described in the current issue of *Science* by Dr. William Charles White of the United States Public Health Service, chairman of the research committee of the Association.

This committee, appointed in 1920, spent a year in surveys of research facilities in tuberculosis hospitals and their laboratories, of funds available for scientific research, of the methods employed by other institutions to stimulate research and of the progress that had been made in tuberculosis research and in other fields of scientific research.

As a result of this study several fundamental conclusions were reached; that the first necessity was the choice of specific problems, that the individual chosen must be one whose knowledge and technique was most likely to insure success in the solution of the problem, that some way must be devised to induce him to under-

take the solution of the problem so as not to interfere with progress in his own field, and that in the laboratories connected with our great universities, where the facilities for research were most abundant, such workers should be found. Funds for the establishment of a national institution for tuberculosis research being lacking, it was decided that the facilities offered by such institutes as the Henry Phipps Institute in Philadelphia and the Trudeau Foundation at Saranac Lake should take its place. In order that the worker should come in contact with workers in other fields, a counsellor or jury system was devised.

Following the report of the committee an allotment for medical research was made in the next budget of the association. Grants made under this allotment provide for assistants, technicians, money for publications, scholarships and necessary equipment, and travelling expenses of the worker. He receives personally no recompense, his reward coming only in the privileges of following his problems in research with greater ease and in having his position enhanced in his university by national recognition. The grant is disbursed through the treasury of the university.

Two government bureaus interested in tuberculosis as a disease—the Public Health Service and the Bureau of Animal Industry have been generous in lending advice and coöperation; two great business interests which benefit tremendously by progress of knowledge in this field—the cattle industry and the life insurance business—have so far taken no part in the work.

In order to supplement the pure research work with clinical studies, sanatoria have been grouped in relation to the university centers and plans have been made to man their laboratories with research students from the university laboratories, giving them definite problems to work out under the direction of the chief of research in the university laboratory.

This plan as outlined, the writer concludes, allows research to be conducted very economically, providing for little overhead expense but enhancing the prestige of the worker, adapting itself to the conditions encountered and yet accomplishing its purpose through the medium of trained skill and science.

It is a pity that the scientist himself, generally so poorly paid, should receive no emolument for his work on an allotted problem; any effort towards efficiency and coöperation in research, however, should be admired and encouraged. Too little of our research is directed towards a practical end; too much of it is done by uninspired workers because it is the vogue; too much of it is independent and solitary, lacking the greater impetus that would come from concerted efforts, directed towards a single goal.



### KOCH SEEKS INVESTIGATION

THE JOURNAL, on July 22, 1926, published an editorial warning its readers against the activities of one William F. Koch, of Detroit, exploiter of a so-called "cancer antitoxin". We did not know whether Dr. Koch was an uncommonly bold type of charlatan or a well meaning but misguided and perhaps mentally unbalanced enthusiast, but despite the records of his associates, as published by the American Medical Association, we gave him the benefit of the doubt.

Dr. Koch responded to this editorial in a letter which challenged the JOURNAL to investigate his claims before condemning them. Investigation before condemnation would seem to be a fair request on the part of Dr. Koch, and it seems only fair on the part of the JOURNAL to explain why it has not seen fit to comply with this request, or challenge. Dr. Koch should be weary of investigation. Honest medical men certainly must be weary of making them, for it appears that Dr. Koch has been accorded at least four impartial investigations to wit:

1. In the *Bulletin* of the Wayne County (Detroit) Medical Society for December 22, 1919 appears the first report of a committee appointed by the Society to investigate the treatment. According to this report the Board of Health of Detroit had placed at the disposal of the committee twenty beds in a local hospital, free of charge. Nine patients were sent to the hospital as proper cases for treatment; five cases were determined to be of undoubted cancer, confirmed by specimens and microscopic examination. The management and treatment of the cases were turned over to Dr. Koch. Dr. Koch being negligent in his treatment of them, the committee met with him and went over the cases. He gave them injection and promised to attend to the treatment regularly. He saw them only once more (three days later) and did not come near them again.

2. A second committee of the Wayne County Medical Society reported in its *Bulletin* for January 5, 1920. This committee had been appointed to gather information from outside sources, and reported that of fifty-six cases of which it was able to obtain data, three showed clinical improvement; twenty-one were dead; three showed improvement following operation; eighteen were stationary or unimproved; eleven were reported on by the surgeon unfavorably, although the results were unknown.

3. In October, 1923, Dr. Koch requested a re-investigation of the Society, and a meeting was called of its Cancer Committee. Thirteen patients were demonstrated by Dr. Koch. In reporting on these the committee stated:

"Out of the hundreds of cases Koch has probably treated, these were demonstrated to us as his best results.

In no instance have we found a case where the diagnosis of cancer was absolutely established and where no other form of treatment had been used in which a cure or any decided benefit had ever been obtained."

4. The *Journal of the American Medical Association* wrote to some of the senders of the hundreds of letters it has received during the last four or five years asking for information concerning the Koch treatment, and inquired concerning the outcome of the cases. Of all these patients about whom information was received, one was still living.

Dr. Koch seems to have had his share of investigations and as a result of them it would appear that his claims are untenable. From the first he has not played the game as honorable men of science are accustomed to play it. He exploits a secret remedy. He cites aspersions on accepted and proven methods. His associates are men of doubtful reputation. The JOURNAL does not consider further investigation necessary, and repeats its warning.

### THE DRINK QUESTION AND FOOD DEFICIENCY AND ILL HEALTH IN GREAT BRITAIN

At the meeting of the British Medical Association held in Nottingham recently, the usual temperance breakfast was given by the National Temperance League.

Among the speakers was Professor A. Louise Mellroy of the Royal Free Hospital, London. Professor Mellroy emphasized the harm done to women by the excessive use of alcohol. She said that in the neighborhood of the Royal Free Hospital, which is situated in a poor district, she saw public-houses filled with women who were frequently drinking gin. When she came West to a fashionable locality, she found women at about six o'clock in the afternoon imbibing cocktails. However, she was of the opinion that the medical profession were doing more than any other body to promote temperance.

Dr. Hogarth, the President of the Association, thought that a great deal of intemperance had been caused by the flippant way in which doctors used to order alcohol, but he thought that the profession was more conscious now than ever that its members ought to be most careful in prescribing alcohol in disease.

In the Section of Public Health, the question considered was that of food deficiency in relation to preventable disease. Of course many speakers attributed much ill health to deficiency in vitamins, while Sir Percy Bassett-Smith ascribed much sickness to the modern methods of preparation of food and the demand for highly spiced eatables. Dr. J. Wheatley said that a formidable array of disease, deaths, and lack of growth and vitality could be caused by

food deficiencies; white bread, sugar and margarine, forming perhaps 90 per cent. of the food of the lower wage-earning classes in British towns, contained almost no vitamins. The causes of the deficiency were ignorance, poverty and the refinement of food over which they had no control. Wholemeal bread should be consumed instead of white bread. Deficiency was also due to ignorance of the value of fruit and vegetables. There was also too much cooking of food. A good plan would be to tax food which did not contain a certain amount of nourishment. Professor Leonard Hill considered that sugars and candy for sedentary people were entirely wrong, but thought we should take heaps of green food, milk and wholemeal bread.

Reviewing the above views, there seems to be little doubt that too much alcohol is consumed in Great Britain at the present time and is the cause or contributory cause of a great deal of the poverty and sickness which exists. With regard to food deficiency there appears to be unanimity of views that a lack of some of the essential nutritive properties of food is responsible for a certain amount of ill health and sickness among the well to do classes and of a large amount of ill health and sickness among the poorer classes. As a rule, the prosperous classes will not conform to dietetic restrictions or regulations either through ignorance or because of self indulgence, while the poorer classes err and suffer through ignorance, but mainly because they are too poor to buy suitable food. The high cost of fresh vegetables and fruit make these prohibitive to them. Although the value of vitamins in a diet has been proved negatively, it is possible that the value of vitamins has been overestimated and that of the mineral salts underestimated. That a certain amount of fresh vegetables and fruit is essential to good health is a question which admits of no argument, and that too much animal food is eaten generally is equally incontestable. That reforms in diet would be to the benefit of all concerned is indubitable, but to gain this end education and a lessening of prices is necessary.

#### THE INVESTIGATOR OF THE FEDERAL GOVERNMENT ST. ELIZABETH'S HOSPITAL

This is a hospital for the care of the insane. Dr. William A. White, a prominent specialist in psychiatry, is the Superintendent. He has appeared in court as an expert in several trials and has spoken in Boston before the New England Psychiatric Society.

The management of this institution was criticised in Congress at the last session and in consequence of suspicions with respect to the administration of Dr. White. Dr. Hubert Work,

Secretary of the Interior, has appointed a committee to conduct a "survey" of this institution.

Dr. George M. Kline of Massachusetts, Dr. H. W. Mitchell of Pennsylvania, Dr. William L. Russell of New York, Dr. Owen Copp of Pennsylvania and Dr. S. E. Smith of Indiana have been invited to serve on this committee. This committee will have to serve without pay for no funds are available for this work.

The questions involved relate to humane and modern methods of treatment, adequate housing space and the professional qualifications of the medical staff.

Since the affairs of the institution are assumed to be unsatisfactory by some, an investigation should be made but the condition imposed on the committee that service must be gratuitous is open to criticism.

Physicians have given so much time to public work without compensation that officials feel ready to ask for assistance. It would be much more consistent if Dr. Work had asked for an adequate appropriation for an honorarium at least for the members of the committee. From the President down servants of the Federal Government with few exceptions are well paid.

We would like to see these investigators make the acceptance of the appointment dependent on a decent financial recognition of the service rendered.

#### THIS WEEK'S ISSUE

CONTAINS articles by the following authors:

TAYLOR, GRANTLEY W., A.B., M.D. Harvard Medical School 1922. Chief Resident Surgeon Collis P. Huntington Memorial Hospital; Assistant in Surgery Massachusetts General Hospital; Assistant in Surgery Harvard Medical School. His subject is "The Treatment of Hemangioma at the Collis P. Huntington Memorial Hospital." Page 737. Address: 520 Commonwealth Avenue, Boston.

FISK, EUGENE LYMAN, M.D. New York University 1888. Medical Director Life Extension Institute. Member of American Public Health Association; National Tuberculosis Association; American Association of Industrial Physicians and Surgeons; Royal Institute of Public Health (London); New York Academy of Sciences. His subject is "The Value of Complete Routine Examinations in Supposedly Healthy People." Page 740. Address: 25 West Forty-third Street, New York City.

HUBER, EDWARD G. Detailed record on page 291, No. 6, Vol. 195. His article is a continued account of "The Control of Communicable Diseases in Massachusetts." Page 745. Address: The War Department, Washington, D. C.

## The Massachusetts Medical Society

### THE COUNCIL MEETING

THE President, James S. Stone, called the meeting to order at 12 o'clock, October 6, 1926, and introduced Dr. David W. Parker, President of the New Hampshire Medical Society, and Dr. Bertram L. Bryant, Secretary of the Maine Medical Association, guests of the Council, who were given the privileges of the floor by unanimous vote. The President in appropriate language called attention to the deaths of members of the Council: Drs. A. H. Quessy of Fitchburg, F. G. Wheatley of North Abington, E. H. Brigham, Librarian Emeritus of the Society, E. H. Bradford, and Charles W. Eliot, Honorary Fellow of the Society, paying especial attention to the dominating influence of each in his particular field.

The committee report recommending no action on the woman's auxiliary was approved. The motion to create a committee on malpractice defence composed of representatives from the several districts was lost and a substitute motion that these matters be referred to the Committee on Ethics and Discipline was carried.

Dr. McKittrick, chairman of the Committee on Arrangements for the annual meeting, announced that negotiations are under way for accommodations at the new Statler Hotel where sufficient space will be available for all meetings of the Society, Council and sections, and assured the members that the committee will provide for the best meeting ever held if information is forthcoming as to the wishes of the Fellows.

The Council approved the suggestion for adding Monday to the sessions in order to stage dry clinics, diagnostic clinics and hospital demonstrations with a smoker in the evening. This will relieve some congestion and antagonism which necessarily occurs when all of the exercises are crowded into two days. It was voted to have the annual dinner about 2 o'clock Wednesday.

The commercial exhibits will be staged in the hotel.

The Committee on Scientific Papers reported that Dr. Philemon E. Truesdale of Fall River will deliver the Shattuck lecture.

The annual assessment was fixed at the usual rate of eight dollars. The recommendation of the election of Allen Winter Rowe, Ph.D., of the Evans Memorial, Boston, was referred to a committee in accordance with the requirements of the by-laws.

The report of the Committee on State and National Legislation, advocating approval of better protective measures against smallpox, one standard of medical practice, giving to the Governor freedom in selection of members of

the Board of Registration in Medicine and authorizing inspection of medical schools by the Board of Registration in Medicine, was approved.

A motion to appoint a committee with authority to appear before the recess committee of the Legislature in order to urge certain changes in the law relating to the work of the Industrial Accident Board, to the end that adequate recognition be given to hospital and medical service, was presented by a member from the western section of the state. This brought out certain pertinent explanations by Drs. Cotton, Mongan and others, and the resolution pertaining to these matters was laid on the table.

A committee was appointed with authority to confer with the Red Cross and government officials in order to perfect plans which may be necessary in times of disaster.

Dr. Parker, the guest of the Council, presented his views on the advisability of forming a New England Medical Council which should be composed of representatives of the New England Medical Societies in order to secure closer and more coöperative activities relating to matters of common interest. Dr. Bryant of Maine, the other guest, heartily endorsed the recommendations of Dr. Parker, and the President reported that Dr. Ricker, Secretary of the Vermont Medical Society, was also in favor.

The Council voted approval of this plan and authorized the President to confer with the Presidents and Secretaries of the other New England State Medical Societies with the purpose of formulating details which could be referred to the several societies for such changes as may be deemed advisable.

The President was instructed to appoint a committee of ten who shall act for the Society in coöperation with representatives of other State Societies in creating a memorial to Walter Reed.

In anticipation of the discussion relative to the report of the Committee on Medical Education the privileges of the floor were given to the deans of Tufts Medical School and Boston University Medical School.

Dr. Charles F. Painter, chairman of the committee, explained the purposes as set forth in the recommendations of the committee submitted to the Council at the last meeting. The report was not acted on at that time but assigned for consideration at the October meeting.

After Dr. Painter's remarks Dr. Horace D. Arnold suggested that because of the length of the meeting further discussion of these matters be postponed and submitted a resolution which in substance approved the work of the committee, endorsed the highest possible standards of medical education and recommended general ed-

neation of the laity so that the principles which govern medical practice would be appreciated by the people. In his preliminary remarks Dr. Arnold expressed concern as to the possible use of the recommendations of the committee in antagonizing certain groups and also in misleading the Legislature.

After a brief discussion it was voted that Dr. Arnold's resolution be referred to the Committee on Medical Education for consideration and further report at the next Council meeting.

A request from Springfield that the Society arrange for a meeting in the western part of this State for the Section on Obstetrics and Gynecology at an estimated expense of about one hundred and fifty dollars was presented, but since the by-laws provide that requests for all unusual expenditures shall be acted on by the Committee on Finance it was voted to postpone action until the next Council meeting.

The usual recommendations of the Committee on Membership and Finance and committees reporting on personal application for reinstatement were adopted.

The meeting was well attended and every subject was given close attention. The expected animated discussion of the recommendations of the Committee on Medical Education was postponed by the motion to refer Dr. Arnold's resolution to the committee. It was expected that at least an hour would be consumed if debate had been carried on.

The amount of business transacted was large and now that the Society has grown to its present size and will continue to grow with added volume of business it is pertinent to suggest that more time will have to be given to future Council meetings, for after the many subjects have been presented and considered and the usual luncheon hour postponed tired and hungry Fellows often seem to be disinclined to give adequate attention to important measures. It may become necessary to have more or longer Council meetings. Perhaps the suggestion that the meeting be called for 11 o'clock might be a move in the right direction, another alternative being an afternoon or evening session.

This, a superficial report conveys very little information to those not present, but this outline should stimulate every Fellow of the Society to read the full report of the proceedings which the Secretary will prepare and which will be published soon.

### MISCELLANY

#### THE NEW MEDICAL ARTS BUILDING IN WORCESTER, MASS.

OUR Worcester brethren are properly disturbed because of a printer's error in reading our text in which the Worcester Medical Arts Building was described as a two instead of a ten story structure. We corrected the misstatement in our issue of October 7. We are very ready

to try and make all proper amends by publishing the list of names of the occupants of this unusual structure designed to facilitate the work of its occupants.

#### TENANTS AND ROOM NUMBERS

Arthur W. Rice	203	Dr. David I. Ljungberg	
Medical Arts Pharmacy	204-205	and Dr. Lester M. Felton	
Chabot Barber Shop	207	702-793-704-705-706-707	
Dr. Hugo O. Peterson		Dr. Francis D. Hart	
and Dr. Thomas J. Cronin	301-302-303-304	708-709	
Dr. Kathalyn Voorhis		Dr. Roger W. Schofield	
	305-306-307	710	
Dr. Clara O. Fitzgerald	308-309	Dr. Ernest E. Smith	
Worcester District Medical Society	310-311-312	701-711-712	
Dr. Anthony D. Vamvas		Dr. William F. Holzer	
	402-403	802-803	
Dr. E. J. LaLiberte	404-405-406-407	Dr. Benjamin F. Andrews	804-805-806-807
Dr. E. H. Trowbridge	408-409	Dr. Raymond W. Cutler	
Dr. Frank E. Harriman	410	808	
Dr. Charles E. Ayers	501-502-503-504	Dr. Gordon Berry	810-811
Dr. Elisha Sears Lewis	505-506-507	Dr. F. L. Magune	801-812
Dr. J. J. Cummings	508-509	Dr. Gardner N. Cobb	
Dr. Charles A. Sparrow	510	and Dr. Michael M. Jordan	902-903-904-905
Dr. Edgar A. Fisher	603	Dr. William E. Denning	
Dr. W. D. Bieberbach	604-605-606-607	906-907	
Dr. Edwin R. Leib	608-609	Dr. Leslie P. Leland	908-909
Dr. Morton H. Langill	610-611	Dr. John W. O'Connor	
Dr. Alfred P. LaChance	601-612	910-911	
		Dr. J. T. McGilleudy	901-912
		Dr. Arthur M. Kimberly	1003-1004
		Dr. George C. Lincoln	1005-1006-1007
		Dr. Oliver H. Stansfield	1008-1009
		Dr. Merton W. Clement	1010
		Dr. Eugene A. Messier	1012-1001-1002

#### RESULTS OF THE JULY, 1926, EXAMINATION CONDUCTED BY THE MASSACHUSETTS BOARD OF REGISTRATION IN MEDICINE

##### PHYSICIANS REGISTERED BY EXAMINATION

Angell, Edwin O.	Springfield Hospital, Springfield, Mass.	Tufts College Medical School.
Barton, Robert B.	80 East Concord Street, Boston, Mass.	Boston University School of Medicine.
Beal, Francis Lindsay	51 Curtis Street, Somerville, Mass.	Massachusetts College of Osteopathy.
Becher, George D.	41 Bridge Street, South Hadley, Mass.	Tufts College Medical School.
Bentz, Felix J.	110 South Street, New Britain, Conn.	St. Louis College of Physicians and Surgeons.
Black, Harry	26 Staniford Street, Boston, Mass.	Tufts College Medical School.
Blaisdell, Carl E.	North Sullivan, Me.	Tufts College Medical School.
Bolosky, Samuel A.	40 Kinnard Street, Cambridge, Mass.	Tufts College Medical School.
Bronfin, Benjamin	21 Eld Street, New Haven, Conn.	Middlesex College of Medicine and Surgery.
Brown, Byron F.	Box 57, Worcester.	Boston University School of Medicine.
Brown, Ruth W.	1 Rock Avenue, Worcester, Mass.	Kirkville College of Osteopathy.
Burgiel, Julius J.	Lawrence General Hospital, Lawrence, Mass.	Tufts College Medical School.
Burton, George V.	Boston City Hospital, Boston, Mass.	Harvard Medical School.

- Canzanelli, Attilio, Cambridge Hospital, Cambridge, Mass. Tufts College Medical School.
- Carmichael, Eustace A., 128 Mill Street, New Bedford, Mass. Meharry Medical College.
- Carroll, John H., Carney Hospital, South Boston, Mass. Boston University School of Medicine.
- Cerchione, Alfred G., 161 Endicott Street, Boston, Mass. Tufts College Medical School.
- Clayman, Morris, 81 Third Street, Chelsea, Mass. Middlesex College of Medicine and Surgery.
- Cole, Adam E., 368 Essex Street, Lynn, Mass. Philadelphia College of Osteopathy.
- Coughlin, William F., Carney Hospital, South Boston, Mass. Tufts College Medical School.
- Courtiss, Morris, 82 East Concord Street, Boston, Mass. Boston University School of Medicine.
- Coyne, John A., 19 Ash Street, Waterville, Me. Harvard Medical School.
- Creedon, Francis, 195 Forest Avenue, Brockton, Mass. University of Cork.
- Culliton, Thomas E., 65 Kirtland Street, Lynn, Mass. Tufts College Medical School.
- Dalton, George D., Braintree, Mass. Tufts College Medical School.
- DeArmit, Lillian, New England Hospital for Women and Children, Roxbury, Boston University School of Medicine.
- DeRoma, Edward R., 16 Ellis Street, Walpole, Mass. Tufts College Medical School.
- Dewing, Norman F., 534 Newbury Street, Boston, Mass. Middlesex College of Medicine and Surgery.
- Dinan, Thomas E., 43 Gould Street, Wakefield, Mass. Tufts College Medical School.
- Doyle, Roger T., 47 Warren Street, Peabody, Mass. Tufts College Medical School.
- Dunlap, Clarence J., 82 East Concord Street, Boston, Mass. Boston University School of Medicine.
- Fasanella, John B., Woonsocket Hospital, Woonsocket, R. I. Tufts College Medical School.
- Feeley, Edward W., 13 Mystic Street, Charlestown, Mass. Tufts College Medical School.
- Fishbein, Jacob N., St. Joseph's Hospital, Providence, R. I. Tufts College Medical School.
- Friedburg, Emanuel E., 1533 Center Avenue, Pittsburgh, Pa. Harvard Medical School.
- Friedman, Hyman B., 259 Campbell Avenue, Revere, Mass. Tufts College Medical School.
- Fritz, Lewis E., Taunton State Hospital, Taunton, Mass. Tufts College Medical School.
- Galligan, Charles A., St. Luke's Hospital, New Bedford, Mass. Tufts College Medical School.
- Gibbons, Joseph F., 96 State Street, Providence, R. I. Tufts College Medical School.
- Gilmore, Robert O., Boston City Hospital, Boston, Mass. Boston University School of Medicine.
- Gipstein, Benjamin L., 28 Mahl Avenue, Hartford, Conn. Middlesex College of Medicine and Surgery.
- Glazer, Manuel M., Brockton Hospital, Brockton, Mass. Tufts College Medical School.
- Goduti, Emil, 83 Hudson Street, Somerville, Mass. Syracuse University.
- Goidys, Frank M., Waltham Hospital, Waltham, Mass. Tufts College Medical School.
- Golinsky, Myer E., 43 Joy Street, Boston, Mass. Tufts College Medical School.
- Greenbaum, Ruth E., 20 Seaver Street, Roxbury, Mass. College of Physicians and Surgeons, Boston.
- Hull, Eunice R., Reformatory for Women, Framingham, Mass. University of Nebraska.
- Izzo, William R., Cambridge City Hospital, Cambridge, Mass. Tufts College Medical School.
- Jacobs, Max H., 491 Commonwealth Avenue, Boston, Mass. Middlesex College of Medicine and Surgery.
- Johnston, Joseph A., 300 Longwood Avenue, Boston, Mass. Yale University School of Medicine.
- Kane, David L., 2 Wyoming Street, Roxbury, Mass. St. Louis College of Physicians and Surgeons.
- Kaplan, Joseph H., 41 Michigan Avenue, Dorchester, Mass. Tufts College Medical School.
- Kapopoulos, Garifalos J., 74 Grove Street, Clinton, Mass. Boston University School of Medicine.
- Keith, Theodore K., 20 Hartford Street, Newton Highlands, Mass. Boston University School of Medicine.
- Keller, Louis, 12 Fowler Street, Dorchester, Mass. Tufts College Medical School.
- Lawler, William S., 73 Nesmith Street, Lowell, Mass. Tufts College Medical School.
- Leary, Frank R., 44 Sheridan Avenue, Medford, Mass. Tufts College Medical School.
- Levine, Harry, Municipal Hospital, Hartford. Middlesex College of Medicine and Surgery.
- Lincoln, Robert E., Waltham Hospital, Waltham, Mass. Boston University School of Medicine.
- McCarthy, Humphrey L., Boston City Hospital, Tufts College Medical School.
- McFarland, William, Barre, Vt. Harvard Medical School.
- McKean, John W., Jr., 131 Lincoln Street, Worcester, Mass. Harvard Medical School.
- McLaughlin, Joseph A., Boston City Hospital, Boston, Mass. Tufts College Medical School.
- McLeod, Ralph C., 290 Green Street, Brockton, Mass. Harvard Medical School.
- McSweeney, Daniel J., 26 Auckland Street, Dorchester, Mass. Harvard Medical School.
- Mallory, Tracy B., 116 Longwood Avenue, Brookline, Mass. Harvard Medical School.
- Marcell, George E., Jefferson Hospital, Philadelphia, Pa. Jefferson Medical School.
- Meserve, Faith L., Kendal Green, Mass. Boston University School of Medicine.
- Messer, Edward C., 56 Endicott Avenue, Revere, Mass. Tufts College Medical School.
- Millman, Max, Worcester State Hospital, Worcester, Mass. Boston University School of Medicine.
- Morrison, Charles J., 480 Brookline Avenue, Boston, Mass. University of Vermont.
- Morrison, Gordon M., 80 Princeton Street, East Boston, Mass. Tufts College Medical School.
- Morse, Lyman R., Bridgeport Hospital, Bridgeport, Conn. Queens University, Ontario.
- Murphy, Bradford J., New England Home for Little Wanderers, Boston. University of Nebraska.
- Murphy, Joseph T., 39 Charles Street, North Abington, Mass. Tufts College Medical School.
- Murphy, Michael J., 5 Eutaw Street, Lawrence, Mass. Tufts College Medical School.
- Murphy, Norman B., 19 South Chestnut Street, Augusta, Me. Harvard Medical School.
- Nathan, Louis, 175 Townsend Street, Roxbury, Mass. Tufts College Medical School.
- Newman, Earl L. B., 91 Oakland Avenue, Providence, R. I. Middlesex College of Medicine and Surgery.
- Newman, Jacob N., 65 Oak Street, Somerville, Mass. Tufts College Medical School.
- Norris, Paul G. B., 53 Neptune Street, Lynn, Mass. Philadelphia College of Osteopathy.
- Norton, Alphonsus D., 8 Pine Street, Hyde Park, Mass. College of Physicians and Surgeons, Boston.
- Nunes, Joseph E., Jr., 22 Sumner Street, Taunton, Mass. Tufts College Medical School.
- Olef, Isadore, Boston City Hospital, Boston, Mass. Harvard Medical School.
- O'Regan, Frederick B., 635 Saratoga Street, East Boston, Mass. Tufts College Medical School.
- O'Sullivan, Patrick A., 8 Hornlett Street, Somerville, Mass. Tufts College Medical School.
- O'Toole, Thomas H., Jr., St. Luke's Hospital, New Bedford, Mass. Tufts College Medical School.
- Paris, William, 12 Elm Street, Chelsea, Mass. Tufts College Medical School.
- Peckham, John M., 58 Stetson Street, Fall River, Mass. Tufts College Medical School.



Perlmutter, Samuel M., 54 Hollander Street, Roxbury, Mass. Tufts College Medical School.

Pesce, Guy C., 206 Havre Street, East Boston, Mass. Tufts College Medical School.

Phillips, Hanford, United States Naval Hospital, Chelsea, Mass. St. Louis University.

Pope, David W., 18 Pratt Street, Avon, Mass. Tufts College Medical School.

Prial, David, 104 Stockton Street, Brooklyn, N. Y. St. Louis College of Physicians and Surgeons.

Reilly, Elinor F., 15A School Street, Quincy, Mass. Boston University School of Medicine.

Reynolds, Edward J., East Boston Relief Station, East Boston, Mass. Harvard Medical School.

Rooney, James S., 2 Sutherland Road, Brookline, Mass. Harvard Medical School.

Rose, David, 30 Lorne Street, Dorchester, Mass. Tufts College Medical School.

Rosenberg, Joel, Beth Israel Hospital, Boston, Mass. Tufts College Medical School.

Rosenthal, Joseph, Kingspark State Hospital, Kingspark, L. I. N. Y. Tufts College Medical School.

Ryan, Mildred L., 57 Gifford Street, Brockton, Mass. Tufts College Medical School.

Savitz, Harry A., 19 Munroe Street, Roxbury. Harvard Medical School.

Scafarello, Peter J., 184 South Main Street, Gloversville, N. Y. Tufts College Medical School.

Schwartz, George, Cumberland Hospital, Brooklyn, N. Y. Tufts College Medical School.

Sheehan, Katherine C., 146 Federal Street, Salem, Mass. Tufts College Medical School.

Sheehan, William A., 45 Strathmore Road, Boston, Mass. Boston University School of Medicine.

Shrier, Hyman, 229 Chapel Street, Newton, Mass. Tufts College Medical School.

Sidell, Samuel, 119 Grove Street, Chelsea, Mass. Tufts College Medical School.

Smith, Cecil, North Dartmouth, Mass. Middlesex College of Medicine and Surgery.

Smith, George VanS., Care of Harvard Medical School, Boston. Harvard Medical School.

Stearns, David B., Massachusetts Homeopathic Hospital, Boston. Boston University School of Medicine.

Stern, David, 11 Poplar Street, Boston. Harvard Medical School.

Stillman, Carl S., Jr., Wellesley, Mass. Los Angeles College of Osteopathic Physicians and Surgeons.

Storrs, Berton W., Portsmouth, R. I. University of Maryland.

Talamo, Haskell, 16 Tahanto Road, Worcester, Mass. Harvard Medical School.

Taylor, Lewis, 23 Central Avenue, Lynn, Mass. Middlesex College of Medicine and Surgery.

Thayer, Rockwood H., 513 Grove Street, Worcester, Mass. Tufts College Medical School.

Toombs, Herbert R., Holden, Mass. Tufts College Medical School.

Townsend, James H., St. Paul's School, Concord, N. H. Harvard Medical School.

Vieiera, Othilla P., 2 Greco Street, New Bedford, Mass. Tufts College Medical School.

Webber, Charles S., 94 Washington Street, Weymouth, Mass. Boston University School of Medicine.

Wells, Ralph H., 82 East Concord Street, Boston, Mass. Boston University School of Medicine.

Wheeler, Daniel R., 759 Chestnut Street, Springfield, Mass. Tufts College Medical School.

Whitmore, Captain William C., Medical Corps, U. S. A., Washington, D. C. Bowdoin Medical College.

Zaripheas, Constantine, A. P., Hartford Municipal Hospital, Hartford, Conn. Boston University School of Medicine.

Zibel, Nathan, 23 Munroe Street, Roxbury, Mass. Tufts College Medical School.

Number examined	196
Registered	126
Rejected	70
Per cent. rejected	35

## REGISTERED ON CERTIFICATION BY THE NATIONAL BOARD

Brown, Howard B., 14 Wendover Road, Longmeadow, Mass. Pennsylvania Medical School.

Carlisle, Paul E., 17 Oxford Street, Springfield, Mass. University of Pennsylvania.

Cramton, Edward A., 467 North Street, Pittsfield, Mass. Yale University School of Medicine.

Deming, Julia, Boston Psychopathic Hospital, Boston, Mass. Women's Medical College, Pennsylvania.

Hunt, Emily F., 721 Pleasant Street, Belmont, Mass. Syracuse University.

Southworth, Franklin C., Woodside Cottages, Framingham, Mass. Harvard Medical School.

Vail, John I. B., Sandwich, Mass. Columbia University.

## CONSERVATION OF VISION

To stimulate interest in the conservation of vision, now recognized as of paramount importance, the Eye Sight Conservation Council of America, Times Bldg., New York City, has issued a publication containing a wealth of material for lectures.

The publication, styled "Bulletin 5," is addressed chiefly to those who have the opportunity to spread the gospel of eye care. "Lantern Slides and Lecture Material on Eyesight Conservation" is the title which describes the content.

The need for conservation of vision is asserted in a carefully written introduction which outlines a serious existing situation, its causes and the necessity for organized action. Facts are presented to show that the eyesight of the American people is a source of moral and physical weakness. Modern life is pictured as imposing new burdens upon the eyes, yet unable to meet these exacting demands. While the discouraging factors are frankly pointed out, the point of view of the publication is conservative, and even optimistic.

"It need not be concluded that our eyes are getting alarmingly worse—they probably always have been bad—but we must learn how to use them and not misuse and abuse them," it is declared.

It is a fact, according to this publication, that a large proportion of the human race have defective vision, most of which is remediable. A lack of knowledge of the prevalence of this condition and lack of proper eye care are, it is stated, in a large measure responsible for much suffering and inefficiency.

How to carry the message of eye care through protection, correction and proper lighting to the masses is a problem which the Eye Sight Conservation Council of America through "Bulletin 5" has greatly simplified for teachers, health workers and members of other professions who by vocation or training are in a position to render a helpful service to society by



delivering lectures before groups of pupils, teachers and parents, before civic clubs, and kindred organizations.

Eye Sight Conservation Bulletin No. 5 will be sent to any interested person for 40 cents, which is merely to cover printing cost and mailing. The lantern slides may be rented or purchased of the Council at a nominal rate.

The appendix contains material for speakers and general writers and emphasizes such themes as errors of refraction, development of the eye, reading in bed, eye strain and eye fatigue, effect of motion pictures on the eyes, eyesight and production, sight and safety, eye strain and output, eyesight of garment workers, tests for efficient lighting and paper glare and book type. Authorities in this and other countries are quoted in support of the general thesis of the publication that eyesight conservation is a national problem which can no longer be safely ignored.

#### THE COMMONWEALTH FUND AND RURAL HOSPITALS

THE Commonwealth Fund, the philanthropic foundation established by the late Mrs. Stephen V. Harkness, is making studies in eleven northern and mid-western states for the location of the third rural hospital to be constructed under a new coöperative program initiated by the Fund last February. Farmville, Va., has been chosen as the location of the first institution under this program and Henry J. Southmayd, Director of the Fund's Division of Rural Hospitals, 1 East 57th Street, New York City, also announced that the contract for the construction of the Farmville hospital has just been signed. Several hundred communities have been considered for the location of the second hospital unit, which will also be placed in a southern state, and the final decision will be made in the near future.

In planning the location of its third hospital, the Commonwealth Fund is now corresponding with county medical societies and chambers of commerce in a large number of northern and midwestern cities of less than ten thousand population. The program under which the gift will be made contemplates the construction of two rural hospitals every year. In the case of approved applications the Fund contributes two-thirds of the cost of construction and equipment while the local community must contribute one-third, and in addition meet the cost of operating and maintaining the hospital.

The Commonwealth Fund of which Edward S. Harkness is President and Barry C. Smith, General Director, was chartered in 1918 as a philanthropic foundation to carry on a wide range of activities for the general welfare. In addition to her initial gift at that time, Mrs.

Harkness made several subsequent donations which increased the capital fund to \$38,000,000. Child welfare, health and educational projects have constituted the principal activities of the Commonwealth Fund which also announced last year the establishment of twenty annual fellowships for British students in American universities.

In undertaking its new program for the construction of rural hospitals the Fund desired to assist in improving conditions affecting public health and medical practice in country districts. It was convinced that rural communities, despite certain natural advantages, frequently afford a less satisfactory opportunity for healthful living than many of our cities. While the causes of such conditions are numerous and complex it would appear that the lack of a sufficient number of competent physicians is a contributing factor which in itself has many causes. In this connection there is general agreement that in many rural communities the physician finds little professional incentive either to establish himself or to remain. The preliminary surveys made by the Commonwealth Fund, as well as other similar studies, have shown that the lack of a modern and well equipped hospital has often meant retarded medical progress and inadequate public health work in many rural communities. It is in the hope of contributing toward improving the conditions of health and medical practice in at least a certain number of such communities that the Commonwealth Fund has undertaken to assist in the construction of rural hospitals.

#### RECENT DEATHS

**JONES**—DR. WILLIAM MARKS JONES, a Fellow of the Massachusetts Medical Society, died at Lowell, September 30, 1926, aged 61.

Dr. Jones was born at Canaan, Me., April 18, 1865. He was a graduate of Harvard College in the class of 1890 and of Harvard Medical School three years later, and settled in practice in Lowell after serving as house officer at St. John's Hospital in that city. That year he joined the State medical society. He was a Fellow of the American Medical Association and a member of several Masonic bodies, as well as of Lowell Post, 87, of the American Legion.

**SPRAGUE**—DR. RUFUS WILLIAM SPRAGUE died of pneumonia at Boston, October 1, 1926, at the age of 79.

He was born in Charlestown in 1847 and was graduated from the Harvard Medical School in 1871. He practised his profession in Charlestown and Boston for many years and at one time was surgeon to the Fire Department of the city and connected with the Board of Health. He joined the Massachusetts Medical Society in 1873 and was retired in 1924.

Dr. Sprague was of old and distinguished Colonial and Revolutionary stock. He was a direct descendant of William Sprague, who settled in Charlestown in 1630, and a collateral descendant of Governor Tristram Coffin of Nantucket. He was a member of many ancestral and patriotic societies, including the Old Planters Society, of which he was vice-president;

the Society of Colonial Wars in the Commonwealth of Massachusetts, the Sons of the American Revolution, and of the Harvard Club of Boston, the Boston Press Club, Faith Lodge of Masons, and the Boston Square and Compass Club.

He was a deep student of New England genealogy. He was fond of outdoor sports and an ardent fisherman, and in his youth an oarsman of some repute. He is survived by his widow, Katherine M. Sprague, and a son.

## CORRESPONDENCE

### EXCERPT FROM A LETTER SUBMITTED BY M. P. HORWOOD

September 16, 1926.

*Editor, Boston Medical and Surgical Journal:*

I have just read your statement on the Tuberculosis survey of Boston which appeared in your JOURNAL for September 9, 1926. I think it will be of the utmost value for all physicians and public-spirited citizens to become more thoroughly familiar with the scope of the recent Tuberculosis survey and the character of the report. I feel that the report represents a strong, potential influence for the improvement of certain public health and Tuberculosis activities in Boston. What we need particularly is more light and less heat in the consideration of the report.

My attention has been called, however, to the possible erroneous opinion which might be obtained by the casual reader from the perusal of the recommendations made in Chapter V of the report dealing with the work of the Department of School Hygiene of the Boston public schools. I am extremely anxious that any possible danger of this sort might be averted, as the report on the work of this department clearly demonstrates that the present activities are organized along most progressive lines and that there is every indication and hope that the work of this department will take its rank with the very best of its kind in the country. It is also important to remember that the survey which I made was conducted during the summer of 1925, and that the present Director of School Hygiene, Dr. John A. Ceconi, had been in office only one month prior to the inauguration of this study. Therefore, any criticism of the conditions that were found certainly cannot be attributed to him, and furthermore, it is also true that the plans which he outlined for the development of the school health program in Boston not only met with my entire satisfaction, but were undoubtedly of the most progressive kind. I am also informed, and I think it to be true, that the recommendations of the report have been completely adopted by the Department of School Hygiene as a working program, and that many of the recommendations which were made in 1925 have already been introduced.

I think we are extremely fortunate here in Boston in having as Director of School Hygiene a man of such sound training and excellent vision as our present Director possesses. I would regret very sincerely if anything in my report should be misconstrued as criticism against him or against any of the splendid activities that he has already inaugurated for the health and well being of the children of Boston.

Very truly yours,

MURRAY P. HORWOOD, PH.D.

### SHALL HEALTH DEPARTMENTS DECLINE TO ACCEPT THE REPORT OF A COMMUNICABLE DISEASE UNDER SOME CIRCUMSTANCES?

September 21, 1926.

*Editor, Boston Medical and Surgical Journal:*

Sir:—I have read with great interest the editorial in the JOURNAL of September 16 and also the letter

of Dr. Hawes on which it is based, but I cannot agree with the implied suggestion that the Boston Health Department should have declined to accept the diagnosis of tuberculosis, in the case under consideration.

You say "Apparently the Boston Board of Health takes the position that all doctors licensed by the Board of Registration are competent to make a diagnosis of tuberculosis."

What other position could it take?

It is not a function of a Board of Health to decide who is competent to practise medicine in Massachusetts; that is a function of the Board of Registration and a Board of Health which tried to censor the acts of the Board of Registration would soon find itself in trouble, not only with the Board but with the profession in general.

It seems to me that the only thing that a Board of Health can do is to accept the diagnosis of any registered physician, no matter what its own feeling in the matter may be.

Before closing, I wish to say that I agree absolutely with the position of Dr. Hawes, taken in his paper before the Massachusetts Association of Boards of Health, that a person should not be reported as a case of tuberculosis unless he has a positive sputum: in fact, I took the same ground myself in a paper read before the Section of Tuberculosis of the Massachusetts Medical Society.

In 1915, the Newton Health Department refused to pay for the care of a patient at a State Sanatorium, on the ground that she was not suffering from a disease dangerous to the public health, because she had never shown a positive sputum. The case finally went to the Supreme Court, on agreed facts, in the hope of getting an opinion from the highest legal tribunal in the Commonwealth as to what constituted reportable tuberculosis.

This we failed to do as the Court simply held that as the case had a legal settlement in Newton, the City was responsible and must pay.

However, in the opinion, the Court used the following language:—"Further, although persons having tuberculosis are not dangerous to the public or others, unless tubercle bacilli are present in the sputum, yet such bacilli may appear at any time." (See 277 Mass. 88.)

How far that sentence would go in justifying a man for following the suggestion of Dr. Hawes and myself, I am not enough of a lawyer to know.

FRANCIS GEO. CURTIS, M.D.,  
Chairman, Newton Board of Health.

### EDITORIAL NOTE

This letter from a recognized expert in health administration is interesting and brings to the attention of boards of health and physicians important questions.

It is common knowledge that when physicians report cases of smallpox some boards of health have experts pass on the diagnosis, not because of any desire to discredit the attending physician but as a health measure based on the necessity of accurate knowledge in order to protect the public.

It may be contended that boards of health may act in this way in reported cases of smallpox and not in reported cases of tuberculosis because the diseases are dissimilar, and yet if there is any question with respect to the practice and standing of a doctor why should not the board of health act in one case as well as in the other?

The argument that the registration of a doctor by the state board takes out of the hands of the board of health any consideration of the quality of the work which has to do with a public health matter is debatable in our opinion. It happens occasionally that a man who can pass an examination and thereby secure registration later demonstrates unfitness

for the duties of a physician. Would it be logical for a board of health to let a man continue to certify to communicable diseases without investigation of his ability or honesty had been questioned?

If the board of health has no legal right to refuse recognition of any certificate issued by a questionable character it could undoubtedly satisfy itself of the quality of the report and if evidence warranted presentation to the board of registration it could act in this roundabout way.

We are of the impression that the boards of health have moral rights in such cases—which would be sustained by public opinion and lead to correction of abuses.

Boards of health occasionally decline to recognize certificates of death and require the doctor to change the wording. If they have this power with respect to records of deaths why not more power with respect to the living.

So far as the comparative dangers of tuberculosis and smallpox are concerned if we apply statistics to the solution of problems, of tuberculosis is tremendously more dangerous than smallpox and tuberculosis is communicable.

The public can be protected against smallpox. Tuberculosis can hurdle over many barriers. Vaccination which under a definite menace can be applied by boards of health erects a barrier before which smallpox is impotent.

#### CERTAIN FRENCH METHODS IN THE PREPARATION OF TOXINS

Paris, France, September 3, 1926.

*Editor, Boston Medical and Surgical Journal:*

The Medical Bacteriologist made a pilgrimage to the Antitoxin Laboratory of the Institute Pasteur, at Garches, near Saint Cloud. Dr. G. Ramon explained the work he has been doing in the past three years. He makes diphtheria toxin or tetanus toxin non-toxic by adding three or four cubic centimeters of formalin per liter, and keeping it in the incubator for a month. It is then tested in two different ways:

Five or six cubic centimeters of this anatoxin, as it is now called, are injected into a guinea pig which must remain well and gain weight steadily for a month. Its weight is recorded every three or four days. The anatoxin is also tested by the method of flocculation to prove that it still has a high degree of power to produce antitoxin—that it is still a good antigen.

The description of the flocculation method was published by Dr. Ramon in the *Annales de l'Institut Pasteur*, for December, 1923. To a series of test tubes each containing say twenty cubic centimeters of the anatoxin, are added decreasing amounts of antitoxin. Note is made of the amount added to the tube which first shows a precipitate or flocculation after several hours at room temperature. The reaction can be arranged to test the antigenic value of a toxin or anatoxin against an antitoxin of known strength, or the antitoxic strength of an unknown serum against a toxin or anatoxin of known antigenic value.

The anatoxin has been used successfully for more than two years to immunize horses. More recently it has been used to immunize children, with successful results in 98 per cent. of the cases. It is given in three doses, with an interval of three weeks between the first and second, and second and third. If the first dose is one-half cubic centimeter, the second is one, and the third dose one and one-half cubic centimeters. Nearly five thousand children have been treated. The report on this work was published in detail in the *Bulletin*, for last May, of the Medical Society of the Hospitals of Paris. In a number of cases the immunity has been proved present after more than twenty-one months. The reactions are few. In several schools immunizing the children

stopped a diphtheria epidemic in a short time. In a preventorium the immunization did not stir up any pulmonary lesions and reduced the incidence of diphtheria to zero.

CALVIN G. PAGE.

#### THE CLINICAL CONGRESS OF THE CONNECTICUT STATE MEDICAL SOCIETY

*Editor, Boston Medical and Surgical Journal:*

It was a pleasure to attend the Second Annual Clinical Congress held by the Connecticut State Medical Society at New Haven, September 21-22-23, 1926, and I have enjoyed it so much that I am writing to the *JOURNAL*, with the suggestion that it might be a fine example for our own State society to copy.

The whole arrangement was ideal. It was held at New Haven and at Yale University. The meeting place was Sprague Hall and all addresses were delivered there. Meetings were called at 10.30 A. M. the first day, allowing one to drive from any part of the State and be in time for the opening session and first lecture. The other day's sessions opened at 8.30 A. M. The program was continuous until 5.30 P. M., with a one to two-hour interval for lunch, which was served at the University Dining Hall in the block next the lecture hall. The first evening a lecture was given, followed by an entertainment at the New Haven Lawn Club. The second evening a complimentary dinner was given at the same place to an honored guest and lecturer of the congress, Dr. Edouard A. Rist, co-director of the Laennec Hospital and Dispensary for Tuberculosis at Paris, France, and was followed by a smoker. Both evenings offered fine opportunities to meet and know those present.

Dormitory accommodations were furnished to all who applied for them and garage parking was arranged for everyone who so desired. At the University Health Center a complete "periodic health examination" was offered to every member of the congress. A tag with a special telephone number on it, where one could be reached without difficulty, was sent to each member, to be hung on his home phone for ready reference.

The dining hall, the dormitory, the garage, the University Health Bureau were all within one or two blocks from the lecture hall where sessions were held. Even the Lawn Club for the evening meetings was but a short walk away.

The membership fee (\$10) included admission to all sessions, the noonday lunch, the health examination and the garage parking for the entire session, and, besides, a reprint in book form of all the papers read during the congress. Rooms, with toilet and bath privileges, were available for a nominal charge of \$1.50 a day. These are but a few of the many excellent arrangements provided by the committee. Many others could be mentioned.

The program was excellent. One needs but to mention the names of some of the speakers to get an idea of its worth. There were Allen K. Krause of Johns Hopkins, William MacDonald of St. Catharines, Ontario, Roy Hoskins of the Ohio State University, Haven Emerson of Columbia, George Blumer of Yale, E. L. Hunt of Columbia, Professor Edouard Rist of Paris, France, Arthur C. Christie of George Washington University, Roger Dennett of New York Postgraduate School, Hugh Cabot of the University of Michigan, John Polak of Long Island Hospital Medical College, and some of our own men, Charles Painter, Frederic Cotton, C. Morton Smith, Robert Osgood and Henry A. Christian.

Good judgment was shown in the selection of speakers and subjects to be discussed. General practitioners, internists, surgeons and specialists found matters of interest relating to their work in the papers and discussions, and must have been able to take home much material for immediate use, as

well as stimulation for further investigation of literature and study.

Much credit is due the program committee and much appreciation was constantly shown by the members present. It was a single, continuous session. There were no two or three things going on at once. Everyone could take in the whole program and everyone seemed to want to do so. Every courtesy was shown to visitors and there was no difficulty in getting detailed information.

I am writing this to the JOURNAL, hoping it may be of interest to the officers and members of our own State Society. Wouldn't it be a proposition worth while for our own Society, and couldn't it be as easily arranged at Harvard and Boston as it was at Yale and New Haven?

If you think the suggestion appropriate, publish this letter and ask for comments, and let me refer your readers to Dr. Henry A. Christian and others who were present, for their opinions as to the worth of such a meeting, and the possibility of having one like it in Massachusetts.

Sincerely yours,

GEORGE DALLAS HENDERSON, M.D.

312 Maple Street, Holyoke, Mass.

#### CONNECTICUT DEPARTMENT OF HEALTH

##### MORBIDITY REPORT FOR THE WEEK ENDING SEPTEMBER 25, 1926

Diphtheria	10	Chickenpox	5
Last week	8	German measles	1
Diphtheria bacilli carrier	1	Malaria	2
Scarlet fever	20	Mumps	3
Last week	17	Pneumonia, lobar	11
Typhoid fever	10	Poliomyelitis	2
Last week	8	Septic sore throat	1
Measles	4	Tuberculosis, pulmonary	32
Last week	2	Tuberculosis, other forms	1
Whooping cough	25	Gonorrhea	12
Last week	17	Syphilis	9
Bronchopneumonia	9		
Cerebrospinal meningitis	2		

##### CASES REPORTED TO THE MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH FOR THE WEEK ENDING OCTOBER 2, 1926

Anterior poliomyelitis	8	Ophthalmia neonatorum	2
Chickenpox	45	Pneumonia, lobar	38
Diphtheria	68	Scarlet fever	124
Dog-bite requiring anti-rabic treatment	6	Septic sore throat	3
Encephalitis lethargica	2	Syphilis	53
Epidemic cerebrospinal meningitis	2	Tetanus	2
Gonorrhea	95	Trachoma	1
Influenza	12	Tuberculosis, pulmonary	97
Measles	11	Tuberculosis, other forms	19
Mumps	55	Tuberculosis, hilum	3
		Typhoid fever	18
		Whooping cough	67

#### REPORTS AND NOTICES OF MEETINGS

##### CENSORS' MEETING

THE Censors of the Suffolk District Medical Society will meet for the examination of candidates at the Medical Library, No. 8 The Fen-

way, Thursday, November 4, 1926, at 4 o'clock. Candidates should make personal application to the Secretary, and present their medical diploma at least one week before the examination.

ARTHUR H. CROSBIE, *Secretary*.

520 Commonwealth Avenue, Boston.

#### COMBINED MEETING OF THE PEDIATRIC SECTION OF THE NEW YORK ACADEMY OF MEDICINE, PHILADELPHIA PEDIATRIC SOCIETY, NEW ENGLAND PEDIATRIC SOCIETY, OCTOBER 16, 1926

##### PROGRAM

10.00 to 11.30 a. m.—Children's Hospital Amphitheatre, 300 Longwood Avenue, Boston.

1. Some Notes on Infant Feeding. Kenneth D. Blackfan, M.D., Joseph Johnston, M.D.

2. Some Observations on the Acid Metabolism of Intoxicated Infants. Bengt Hamilton, M.D.

3. Variations in the Diastase of the Blood of Infants. George Guest, M.D.

4. Reflex Activity after Transection of the Spinal Cord. Bronson Crothers, M.D.

11.45 a. m. to 12.30 p. m.—Deaconess Hospital, Pilgrim Road, Boston.

1. Diabetes in Childhood, Elliott P. Joslin, M.D.

12.45 p. m.—Luncheon at the Harvard Medical School.

2.00 to 3.00 p. m.—Peter Bent Brigham Hospital, Francis Street, Boston.

1. Neurological Surgery in Childhood. Harvey Cushing, M.D.

After the meeting an opportunity will be afforded to visit other hospitals and the Peabody Home for Crippled Children.

7.00 p. m.—Dinner at the new University Club, Stuart Street, Boston.

Professor William T. Bovie of Harvard University will give an informal talk on "The Physics of Heliotherapy: Its Possibilities and Its Obstacles."

#### JOINT MEETING OF THE BOSTON ORTHOPEDIC CLUB AND THE NEW ENGLAND ACADEMY OF PHYSIOTHERAPY

A JOINT meeting of the Boston Orthopedic Club and New England Academy of Physiotherapy will be held at the Medical Library, Wednesday evening, October 20, at 8:15 p. m. Sir Henry Gauvain, who is the leading English authority on ultra violet, will speak on "The Treatment of Tuberculous Cripples." The discussion will be opened by Dr. W. T. Bovie and Dr. Robert B. Osgood.

**CLINICAL CONGRESS OF THE AMERICAN COLLEGE OF SURGEONS, MONTREAL, OCTOBER 25-29, 1926**

The Canadian Pacific Railway, in conjunction with the Boston & Maine, has named a special fare of fare and one-half for the round trip on the convention certificate basis; that is, ticket for the going journey is purchased at regular one-way fare of \$11.80. When purchasing railway ticket you should specify to selling agent that you are attending the above meeting, and he will issue a certificate, to be endorsed by the convention transportation officer and presented to the ticket agent at Montreal, which will entitle you to purchase return ticket at half fare. Train service between Boston and Montreal is as follows:

Lv. Boston	9:00 A. M.	10:15 P. M.
Ar. Montreal	7:30 P. M.	8:50 A. M.
Returning		
Lv. Montreal	9:10 A. M.	8:30 P. M.
Ar. Boston	8:05 P. M.	7:00 A. M.

Sleeping car fares between Boston and Montreal are: Lower berth, \$3.75; section, \$6.75; compartment, \$10.50; drawing room, \$13.50. A parlor car seat between Boston and Montreal is \$2.25.

**FIRST ANNUAL CONVENTION OF THE NEW ENGLAND ASSOCIATION FOR PHYSICAL THERAPEUTICS, INC.**

Will Be Held in Boston, at the Copley Plaza.  
October 26, 27, 28, 1926

**PROGRAM**

*Tuesday Morning, October 26*

1. President's Address, George J. Ott, M.D., Boston.
2. Solar Energy, Solon Abbott, M.D., Franklin.
3. Recent Methods of Increasing Resistance in Infections, George E. Percy, M.D., Salem.
4. Ultra Violet Therapy in Pediatrics, Edwin T. Wyman, M.D., Boston.
5. Basis of Light in Therapy, Herman Goodman, B.S., M.D., New York. Illustrated on blackboard and with moving pictures.

*Tuesday Afternoon, October 26*

1. Laboratory Demonstration of the Physics of a High Frequency Current, Mr. Kurt Stoye, Physicist, New York.
2. Electrotherapy vs. Surgery in Abdominal Diseases, L. H. Levy, M.D., New Haven.
3. Delayed Union in Fractures, Frederick J. Cotton, M.D., Boston.
4. The Present Status of the Treatment of Cancer, E. M. Daland, M.D., Boston.
5. Physiotherapy in Relation to Orthopedics, B. A. Godwin, M.D., Boston.

*Tuesday Evening, October 26*

1. Some Impressions of Physical Therapy in Europe, Richard Kovacs, M.D., New York. With slides.
2. The Importance of Accurate Diagnosis Before Physiotherapeutic Measures Are Instituted, William Edward Browne, M.D., Boston.
3. Demonstration of Electrical Muscle Testing, Richard Kovacs, M.D., New York.

*Wednesday Morning, October 27*

1. Physical Modalities in the Treatment of Tonsils, Herman Osgood, M.D., Boston.
2. Hydrotherapy in Mental and Nervous Diseases, Arthur H. Ring, M.D., Arlington.

3. H. V. Robinson, M.D., Montreal. (Title to come.)

4. Physiotherapy in the After Treatment of Fractures in Children, James S. Stone, M.D., President of the Massachusetts Medical Society.

5. The Principles of Radiation Therapy, Frank Thomas Woodbury, M.D., Lieutenant Colonel United States Army (Ret.), New York.

6. The Static Modalities in Gynecology, Mary Arnold Snow, M.D., New York.

*Wednesday Afternoon, October 27*

1. The Value of Colecystography by the Intravenous Method of Using the Dye, Walter C. Barker, M.D., Philadelphia.
2. Intestinal Abnormalities and Their Correction, J. Gutman, M.D., Brooklyn. With slides.
3. Chronic Constipation and Its Management, Peter J. Kessler, M.D., New York.
4. Some Types of Reflex Pain Not Commonly Recognized, William Martin, M.D., Atlantic City.
5. The Static Current in the Treatment of Inflammation, William Benham Snow, M.D., New York.

*Wednesday Evening, October 27*

Banquet in State Suite, 8 p. m.

*Thursday Morning, October 28*

1. Treatment of Defective Eyesight and Diseases of the Eye, Dr. S. J. Harris, Boston. With slides.
2. Roger Graves, M.D., Boston, Mass. Title to come.
3. The Relationship of the State Health Department to Practicing Physicians, by Merrill Champion, M.D., Director of Massachusetts Division of Hygiene.
4. The Important Uses of Diathermy in an Industrial Clinic, L. Feldman, Boston.
5. Surgical Diathermy in the Treatment of Hemorrhoids, William Bierman, M.D., New York.

*Thursday Afternoon, October 28*

1. Certain Lung Lesions with Special Reference to Spasmodic Cough, L. B. Morrison, M.D., Boston.
  2. Physical Measures Applied in Acute Trauma, M. A. Cohen, M.D., Boston.
  3. Fundamentals of Physiotherapy, Elmer F. Otis, M.D., Melrose.
  4. A New System of Muscular Exercises Develops Poise and Concentration, Demonstrated, Walter B. Swift, M.D., Boston.
- All regular physicians welcome.

**THE TENTH ANNUAL MEETING OF THE NEW ENGLAND SURGICAL SOCIETY**

This meeting was held in Boston, October 1 and 2. The exercises began with a clinic at the New England Deaconess Hospital at 9 a. m. Dr. Frank H. Lahey performed operations as follows:

9:30—Carcinoma of Pyloric Portion of Stomach—Subtotal Gastrectomy.

11:00—Bantist Disease with Splenomegaly—Splenectomy.

12:00—Carcinoma of Left Breast—Radical Amputation of Breast with Dissection of Axilla.

1:00—Gall Stones—Cholecystectomy.

Dr. Howard M. Clute performed a Gland Dissection of Discrete Cervical Tuberculous Glands and a Subtotal Thyroidectomy.

Drs. Daniel F. Jones, Leland S. McKittick and Howard M. Clute conducted a dry clinic illustrating the surgical problems presented by diabetic patients. Dr. Jones especially empha-



sized the advantages of amputation of limb without drainage except in those cases where lymphangitis is present. Sepsis presents definite problems and must be avoided if possible. Dr. Clute explained the problems incident to Thyroid, Kidney and Appendix Operation on Diabetics. In one severe case of peritonitis a patient was kept alive for fourteen days by the use of glucose and salt solution without food and made a recovery.

Adjournment was made to the Peter Bent Brigham Hospital, where Dr. Harvey Cushing showed interesting cases of disease of the pituitary body and explained problems which sometimes lead to confusion when the usual symptoms of thyroid activity are present.

Dr. David Cheever performed a partial gastrectomy, Dr. John Homans a Case of Stone in Common Duct, Dr. W. C. Quimby on a Case of Hydronephrosis, and Dr. Harvey Cushing on a Case of Sarcoma of the Brain.

Luncheon was served in the School of Public Health, Harvard Medical School. The afternoon session was opened by the President, Dr. William H. Bradford of Portland, Me. After delivering the Introductory Remarks which appear below, the literary program was carried on. The papers and discussions will appear in subsequent issues of this JOURNAL.

#### INTRODUCTORY REMARKS

BY WILLIAM H. BRADFORD, PORTLAND, ME.

#### *President of the New England Surgical Society*

Doubtless no one here has given even a passing thought to the fact that this is the tenth anniversary of the organization of the New England Surgical Society. Our younger members would not be aware of it and we who were present at the first meeting can hardly realize that a decade has gone since that notable event, so swift is the passing of time.

However, since this is the case it seems fitting to review briefly the history of the formation of the society.

The first question to arise was "When and with whom did the idea originate?" When Dr. Philemon E. Truesdale of Fall River, our first Secretary, was asked he replied that the idea of a New England Surgical Society probably was not an original one in the mind of any individual.

I believe, however, that modesty on his part prompted the answer, for, from information gathered, I am fully convinced that to no other than Dr. Truesdale belongs this honor. As he came in contact with many of the surgeons of New England he realized there was no organization where these surgeons could meet for the exchange of ideas and discussion of subjects of common interest.

In 1909 he presented the matter to Dr. Mau-

rice H. Richardson and asked his opinion as to the feasibility of starting a New England Surgical Society and also whether he would consent to be the first President should such a society be formed.

The plan met with Dr. Richardson's hearty approval and he expressed a willingness to become its President. Outside matters, in addition to his regular work, prevented Dr. Truesdale from giving further attention to this subject for several years, while the death of Dr. Richardson caused more delay.

The matter was again taken up in 1915. The setting was a beer garden in San Francisco during the meeting in that city of the American Medical Association.

Here Dr. Truesdale and Dr. Peer P. Johnson of Beverly mapped out a plan of procedure. They sought the opinion upon the subject from surgeons of the highest standing in New England. The response was immediate and most enthusiastic. Finally they presented the whole proposition, together with the correspondence, to Dr. Samuel J. Mixter of Boston, who first hesitated to sanction the idea as Boston men were overworked and overstocked with society affiliations, then, sensing the possibilities of pleasure and profit by meeting with these men at least once a year, agreed to help in the organization of a society and to become its first President.

On February 5, 1916, the inaugural meeting was held at the Harvard Club in Boston, at which meeting the New England States were represented as follows: Massachusetts, by Drs. Samuel J. Mixter, Peer P. Johnson, Charles A. Porter, Halbert G. Stetson, William P. Graves and Philemon E. Truesdale; Vermont, by Drs. John B. Wheeler, Henry C. Tinkham and Lyman Allen; New Hampshire, by Dr. Herbert L. Smith; Rhode Island, by Drs. Edgar B. Smith, John W. Keefe and Arthur T. Jones; Connecticut, by Drs. John W. Churchman and Joseph M. Flint; Maine, by Drs. William L. Cousins and William H. Bradford.

The meeting was called to order by Dr. C. A. Porter and organized by the election of Dr. Samuel J. Mixter as President, who expressed himself as pleased to see the New England Surgical Society formed.

He then set forth the aims of the society, expressed his belief in its usefulness, spoke of the type of men that should be selected for membership and finished his remarks with the following statement: "The New England Surgical Society is formed and I am very glad to be your first President."

Other officers and an executive committee were then elected. On Dr. Mixter's suggestion a list of honorary members was elected.

Thus the New England Surgical Society came into being.

The first regular meeting was held in Boston



in October of that year. It is needless to say that the idea of a New England Surgical Society was a most excellent one. The work already accomplished; the enthusiasm developed among the members for higher aims and more efficient service; the earnest desire of the best men in our profession throughout New England to become members—all these facts not only prove the wisdom of the plan, they also show that the New England Surgical Society has already taken a most enviable place among organizations of its kind throughout the country.

After the literary exercises Dr. Charles G. Mixer entertained the society at his home in Brookline.

Among other things Dr. Mixer exhibited several interesting moving pictures of hunting and fishing trips. The many pictures of a ravenous crowd of hunters enjoying a hearty meal, the handsome strings of fish and dainty quail no doubt accounted for the stimulation in appetite displayed later at the dinner.

The annual dinner was served in the Harvard Club to 83 members of the society. At the conclusion of the banquet the President delivered the following address:

ADDRESS OF WILLIAM H. BRADFORD, M.D., PRESIDENT OF THE NEW ENGLAND SURGICAL SOCIETY, AT ITS TENTH ANNUAL BANQUET, HELD AT THE HARVARD CLUB, BOSTON, MASS., OCTOBER 1, 1926

SUBJECT: SOME FUNDAMENTALS OF GOOD SURGERY

This society was formed to create one more agency for the promotion of higher ideals and more accurate and useful results in surgery. Through it, representative New England surgeons were periodically to be brought together in social conference for an interchange of ideas and experiences and for the consideration and discussion of matters deemed of interest and importance for the advancement of their profession.

Already the society has a decade of useful service to its credit and I am sure that never since its organization have its members had a deeper or more sincere purpose than at present, to establish their profession in the merited confidence of the public through the display of the greatest possible efficiency and of high-minded and unselfish endeavor. The minarets and spires of the profession, however brilliant and perfect in detail, will not meet the admiring gaze for long unless its foundations are ample and secure.

At the risk, therefore, that I may deal only with what is already within your knowledge and appreciation, I am going to devote myself to a brief consideration of some of the fundamentals of the profession.

There seems to me to be three major funda-

mentals, namely: Character, intelligence and proper training.

Two of these, character and intelligence, are, in large measure, perhaps, the results of natural endowment. The third, training, depends largely on one's own choice and the fibre of his purpose. It is true that the severity of medical education leaves a more or less picked group attempting surgery, yet even this picked group is not necessarily thoroughly trained. While the medical schools have done much to improve the curriculum, the criticism is now made that they give too much attention to turning out men qualified for surgical research or chiefs of staffs in large hospitals, to the neglect of much that would be of value to the general surgeon in an average town or city. For example, in a community with which I am familiar, the statement was recently made that out of about a dozen men confining their practice largely to surgery, only a small proportion are adequately trained. This condition probably holds in most of our cities of one hundred thousand or less population. Since these constitute nine-tenths of the communities in this country, it would seem to follow that most of our surgery is being performed by men who are relatively incompetent. This does not necessarily mean that most of our surgery is badly performed. Much of the routine work of these operators can be termed successful. It is in the obscure and atypical cases that they fail. Owing to the necessity of keeping as many patients as possible in order to acquire income and lay aside competency for age, these men are continually led into attempting things for which they are not properly trained. The remedy then comes in inducing them, as far as possible, to make themselves competent by more comprehensive and thorough education and training.

With the advanced admission requirements of our medical schools, two of the deficiencies of my generation of surgeons will be overcome, namely, the lack of general knowledge, and slack teaching at a poor medical school. The third one, and the most dangerous, is that the surgeon is not sufficiently studious in his own practice.

The decision to take up surgery always has been, and probably always will be, made late in the majority of instances. It is, therefore, futile to lay down a curriculum for the training of surgeons apart from that given to general medical students. Our problem is to stimulate these younger men, when they have made their decision, to devote themselves to the proper type of study. Such men do not want to do poor surgery, and ignorance is always as great a factor as material self-interest in their ill-advised operating. One of the commonest and most frequently repeated errors in operating is illustrated by the case of a woman who importuned me for a long time to operate upon her for a most distressing condition. It seemed to me

very doubtful whether she would receive any relief from surgery, and, too, she was plainly in no condition to be operated upon. The next time I heard of her she had died within twenty-four hours of an operation by another surgeon. Unquestionably, the operator was influenced in his decision by the fee for operation, although of course he had no intention of killing the woman nor would he have operated without some hope on his part of benefiting the patient. He was misled by his ignorance of surgical end-results.

Now the first impulse of young men with a too meagre training and experience who wish to equip themselves for surgery, is to go to some clinic and watch the operating of men with reputations for dexterity. While this is commendable, nevertheless, if their time is so short that they must confine themselves to one sort of post-graduate work, this is not the variety to choose first. If I were to select the one chief cause of poor end-results, it would be the lack of proper understanding of laboratory diagnosis. It is my firm conviction that without actually working in a laboratory and making the tests, no surgeon can understand their actual significance. An illustration of what I mean came up recently in connection with the discussion of hyperglycemia. A tendency to increased blood sugar is a well recognized factor in the preparation of a patient and the choice of time for operation, yet how many surgeons have ever thought whether, for their especial purpose, the blood sugar estimate should be made on a fasting stomach, on the patient's ordinary diet, or on a full carbohydrate meal?

Next in importance, I should place the making, by a surgeon, of contributions to surgical literature. Such contributions compel careful studying of cases, careful studying of the subject, and acquiring familiarity with previous contributions on the same subject. To learn how the great medical minds of the past have approached a given problem is of inestimable value in attacking the problems of today, because the work of the past is the foundation of all our knowledge, and countless hours are lost by those of us who work out again and again the experiments which we could find already performed, and often much better performed, by pioneers in medicine. This is entirely apart from the purely selfish inducement that only by writing can a surgeon, so to speak, put himself on the map. He thus gains the attention and earns the respect of his associates and enlarges his following. In this way, he becomes known to the leaders in medical thought, receiving their friendship and those confidences which they give their friends.

Contributing to the literature of the profession tends in itself to develop a taste for research and an interest in the solution of the problems which vex us in everyday practice. Such an interest is in itself of no small benefit.

Obviously these three suggestions mean studying cases more carefully. Consequently, if a man's time is too completely filled to otherwise allow it, it follows that he must see a few less patients. It is very difficult to convince the younger men already achieving financial and professional distinction that they will be compensated for this by increased ability and assurance.

We can, all of us, accomplish something by advice, more by coöperation, and most by example. It behooves us, then, to extend to these younger men a helping hand where this is possible. I think we must admit that our reluctance arises not alone from lack of confidence in their ability, often justifiable, but also from the realization that their growth takes place along with our decline. Such cheap jealousy is as unprofitable as it is unworthy. Whether we will or not these young men are to succeed us. In the eyes of the public, which is unable always to discriminate, their mistakes discredit us all. It is then for our selfish interest to encourage them to improve their work. In addition, from my own personal experience, I can say that all the help that I have in my lifetime tried to give to promising graduates has come back to me manifold from their fresh viewpoint and familiarity with new methods. In closing, I wish to make it perfectly clear that on us rests the responsibility of training our successors. We should strive to avoid the temptation of simply inviting them to come and see how cleverly we operate but should try to persuade them by precept, coöperation and example that the duller, more arduous, and less lucrative aspects of the work are in the end the most useful. Time spent in the laboratory, in studying their own cases before and after operation, in following up surgical end-results in the larger clinics, in writing, and in research will give them confidence in their powers and a foundation for future achievement well worth the sacrifice that it entails.

It is true that surgical education of the present has many shortcomings. It is equally true that today there live more great surgeons and a finer and better trained group of surgeons than history has known. In the training of our successors, we can do little better than to remember the ideals of Guy de Chauliac: "Let the surgeon be well educated, skilful, ready and courteous. Let him be bold in those things that are safe, fearful in those that are dangerous, avoiding all evil methods and practices. Let him be tender with the sick, honorable to men of his profession, wise in his predictions, chaste, sober, pitiful, merciful; not covetous or extortionate, but rather let him take his wages in moderation, according to his work and the wealth of his patient and the issue of the disease and his own worth."

Dr. Elliott Proctor Joslin then entertained the company with an address in which the interdependence of the physician and surgeon in dealing with diabetes was emphasized. He paid a tribute to John Homans, Maurice Richardson and Samuel J. Mixer, to whom he owed much for the inspirations of early professional life.

He made his points clear by striking illustrations and elaborate explanations. Two of the important points brought out were the essential benefits of laboratory findings and the fact that the cooperation of surgeons has made a large measure of success possible in treating this disease. Dr. Joslin's paper will be published in full and we can promise our readers an almost complete treatise on the important phases of diabetes, especially as influenced by surgery and as observed by Dr. Joslin during the past few years.

The business meeting was held in the Amphitheater of the Massachusetts General Hospital on Saturday. The President, Dr. William H. Bradford of Portland, presided, and the following men were elected to membership:

Allison, Nathaniel, Boston, Mass.  
Alton, Benjamin H., Worcester, Mass.  
Clute, Howard M., Boston, Mass.  
Eastman, Eugene B., Portsmouth, N. H.  
Fraser, Archibald M., Boston, Mass.  
Homans, John, Brookline, Mass.  
Lambert, H. Bertram, Bridgeport, Conn.  
Quimby, William C., Brookline, Mass.  
Walker, Irving J., Brookline, Mass.  
Worthen, Thacher W., Hartford, Conn.  
Young, Edward L., Jr., Brookline, Mass.

Dr. F. A. Washburn, Director of the Massachusetts General Hospital, delivered an address explaining the part this hospital had in establishing the value of sulphuric ether anaesthesia. Since the meeting was held in the old operating room where the original demonstration was staged the position occupied by the speaker and the place furnished the inspiration which made the address one of unusual interest.

The following officers were elected for the ensuing year:

For President: Daniel F. Jones, M.D., Boston, Mass.

For Vice-President: William W. Townsend, M.D., Burlington, Vt.

For Secretary: Ernest A. Wells, M.D., Hartford, Conn.

For Treasurer: Peer P. Johnson, M.D., Beverly, Mass.

For Recorder: Walter G. Phippen, M.D., Salem, Mass.

It was announced that the next meeting would be held in New Hampshire, either at Manchester, Concord or Nashua, or all three.

A photograph of the members present was

taken just before the meeting. Any member desiring a copy of this picture may have one by sending \$1 to the Recorder, Dr. Walter G. Phippen, 31 Chestnut Street, Salem, Mass.

#### THE ANNUAL MEETING OF THE MASSACHUSETTS PSYCHIATRIC SOCIETY

THE annual meeting of the Massachusetts Psychiatric Society will be held at the Hotel Somerset, Thursday evening, October 21st. Dinner will be served at 6:30 P. M. The business of the evening will be the election of officers, reports of Committees, and the election of members. The Society will be addressed by Professor Francis B. Sayre of the Harvard Law School.

#### MEETING OF STAFF OF MASSACHUSETTS HOMEOPATHIC HOSPITAL, BOSTON, OCTOBER 9, 1926.

THE regular monthly meeting of the Staff of the Massachusetts Homeopathic Hospital was held in Evans Memorial on Friday, September 24, 1926, at 8 P. M.

##### PROGRAMME

1. Analysis of Service for the month of June, July and August.
2. Necropsy Report for the month of June, July and August.
3. "Case Presentation." Frances I. Upham, Social Service Department.
4. Report of the committee on Staff meeting.
5. Question Box.

#### HARVARD MEDICAL SOCIETY

THE first meeting of the Harvard Medical Society for the scholastic year will be held in the amphitheatre of the Peter Bent Brigham Hospital Tuesday, October 19, at 8:15 P. M.

The speaker will be Dr. Harvey Cushing. Subject: Remarks Upon 100 Cases of Acromegaly with Especial Reference to the Basal Metabolic Rate and Carbohydrate Tolerance.

All members of the medical profession, medical students and nurses are invited.

#### ESSEX NORTH DISTRICT MEDICAL SOCIETY

THE 85th Quarterly Meeting of the Society will be held at Essex Sanatorium, Middleton, Mass., (tel. 300-W) on Wednesday, Oct. 20, upon invitation of Olin M. Pettingill, M.D., Superintendent, and is a combined meeting with these District Societies: Middlesex East and North, and Essex South.

The programme is as follows:

2 to 3—Clinic by the Hospital Staff in the chapel.

3 to 5—These speakers will present addresses in the main dining room:

(a) James S. Stone M.D., of Boston, President of the Massachusetts Medical Society, upon "Some Problems Confronting the Society."

(b) George H. Bigelow M.D., of Boston, Commissioner of Public Health of Massachusetts, upon "What Should the Department of Public Health Do Under the Recent Cancer Legislation?"

(c) Paul D. White M.D., of Boston, Instructor in the Harvard University Medical School upon "Angina Pectoris."

Discussions are invited upon these topics.

5 to 6—Inspection of the institution and ward visits under supervision of guides.

6 P. M.—Lunch in main dining room.

The next meeting of the Censors will be held in Hotel Bartlett, 95 Main st., Haverhill, Mass. (tel. 3430) on Thursday, Nov. 4, at 2 P. M. sharp. Candidates should present their diplomas to Secretary one week in advance.

ROY V. BAKETEL M.D., *President*.

October 11, 1926.

J. FORREST BURNHAM M.D., *Secretary*,  
567 Haverhill St., Lawrence, Mass.

#### LECTURES ON PSYCHOANALYSIS BY DR. FERENCZI

DR. SANDOR FERENCZI of Buda-Pest is at present in the United States for an extended visit and is giving lectures in New York on Psychoanalysis. Plans are being made to arrange a short course of lectures in Boston for physicians, on the theory and practical aspects of psychoanalysis. These lectures will be given in English.

Dr. Ferenczi is one of the pioneers and leading exponents of psychoanalysis and an original and fertile thinker in this field. Several of his books and a number of his papers have been translated into English.

Before any plans for the projected Boston lectures can be definitely arranged, it is necessary to know how many physicians will be interested in taking the course. All communications should be addressed to Dr. Isador Coriat, 416 Marlborough Street, Boston, Massachusetts.

#### PROFESSOR ALEXANDER SAMOILOFF ADDRESSES PHYSIOLOGISTS

At the opening meeting of the Physiological Conference of the Harvard Medical School held September 30, 1926, at 4 P. M., in the Bowditch

Library of Harvard Medical School, Professor Samoiloff lectured on the subject, "Characteristics of Spinal Reflex Inhibition."

Dr. Samoiloff discussed some important and very interesting characteristics of spinal reflex inhibition. On the basis of his own experiments showing the relatively long duration of the central inhibitory effect in response to a single break shock stimulus (a matter of several seconds), he disagreed with the hypothesis of Lucas and Adrian which accounts for central inhibition as a manifestation of the phenomenon known as the Wedensky effect, and he inclined strongly toward the view that reflex inhibition is caused by the liberation of some chemical inhibiting substance at the central synapses or nerve cells. He pointed out that this happens to be the same view as that recently arrived at independently by Sherrington, the English physiologist, from similar and additional lines of experimental evidence. The shift from the Wedensky view, (also known as the "Interference Hypothesis" of central inhibition) to the chemical view is a strong and interesting tendency in present day neurophysiology.

Afterwards the paper was discussed at length by various members of the Department of Physiology.

Dr. Alexander Samoiloff is the Professor of Physiology at the University of Kasan in southern Russia. Kasan is an attractive university town of 30,000 population, and is commonly known as the "Heidelberg of Russia." Professor Samoiloff is widely known in clinical circles for his investigations upon the electrocardiogram, and for many years has been a close friend of Dr. Paul White of this city. Lately he has contributed extensively to our knowledge of neuromuscular coordination, employing also for this work the technique of the string galvanometer.

Dr. Samoiloff was originally a student of Pavlov and it is interesting to recall that when an assistant in his laboratory, Dr. Samoiloff was the first to succeed in making the so-called "Pavlov pouch" in the stomach of the dog. He modestly disclaimed all credit for this achievement, since he did it at the suggestion of his professor.

After attending the Twelfth International Physiological Congress at Stockholm early in August Professor Samoiloff came to this country to visit his twin sons, who have lately attended the Harvard Engineering School. He sailed last Saturday for Holland, where he expects to spend a month in the laboratory of Professor Rudolph Magnus in Utrecht. It will be recalled that Professor Magnus visited Boston last June after lecturing in Canada. Mrs. Samoiloff, who is still in this country, will join her husband in Utrecht in November.